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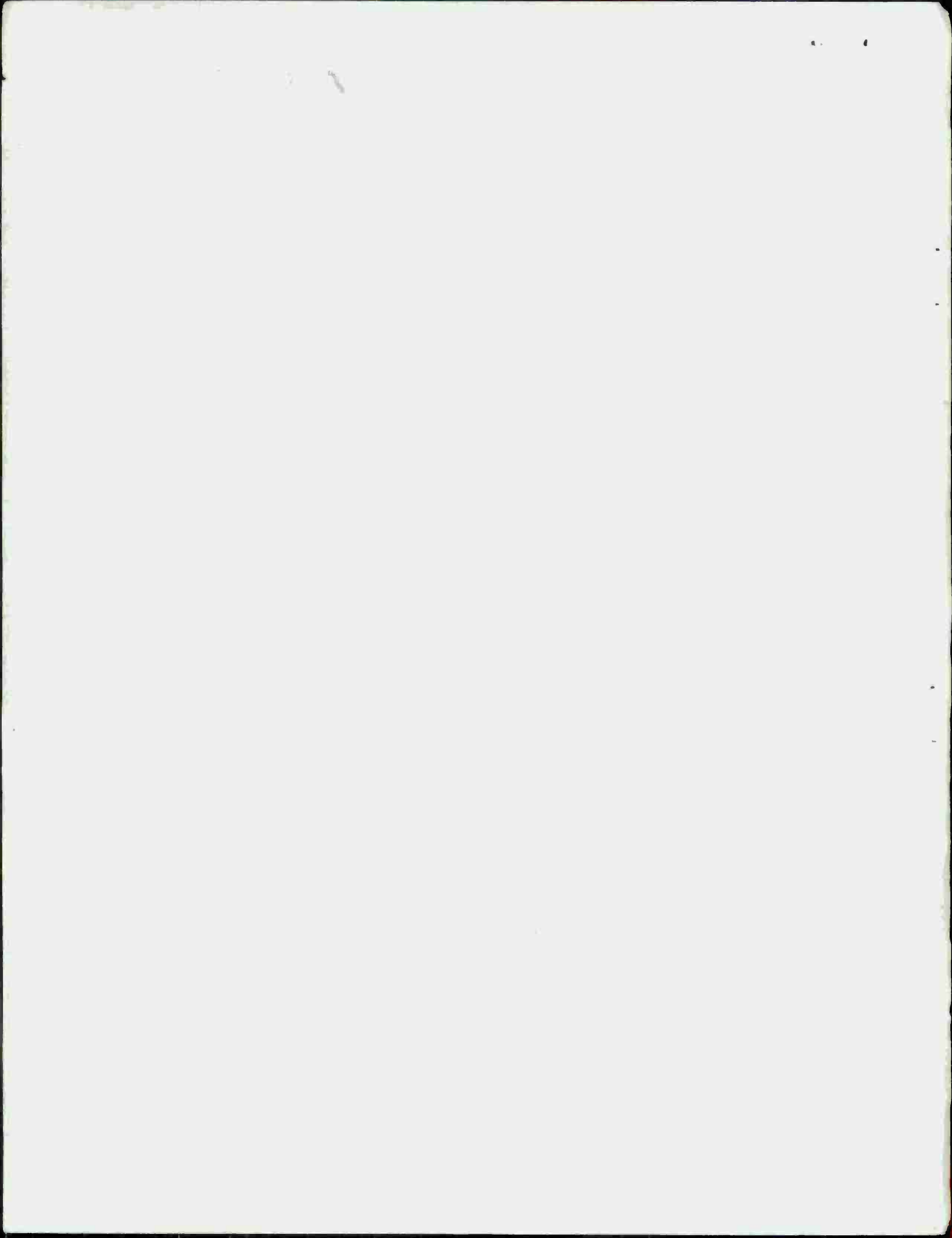
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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) A Field Study involving 583 ROTC Summer Camp Platoon Members and 104 acting Platoon Leaders produced significant behavioral differences between High and Low Performing Leaders, and the way in which they were perceived by High and Low Stressed followers. Normative as well as Descriptive data were collected and analyzed. High specific behavioral correlates with a Consolidated Leadership Performance Score were obtained. Clear-cut Behavioral correlates of Leader LPC Scores were obtained, also.		

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AN ANALYSIS OF MILITARY LEADERSHIP IN A REALISTIC  
FIELD SETTING

By

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Technical Report 70-6

## AN ANALYSIS OF MILITARY LEADERSHIP IN A REALISTIC

### FIELD SETTING

A survey of definitions of leadership reveals a dominant theme of influence via personal interaction. This context is appropriate to the purposes of the present study. Leadership is viewed as being limited, primarily, to face-to-face relations in managing others toward the favorable achievement of assigned goals.

It is now well-established that the effectiveness of given leader behaviors is contingent upon the circumstances in which they occur. A review of important research findings in this regard, along with a normative leadership model designed to accommodate team-oriented situations, is presented by Fox (March 1974).

Also, it is much easier to be a successful leader in some situations than in others. For example, it would be inestimably easier to succeed as an elected songleader at a social beerbust soliciting song preferences from contented volunteer singers, than to succeed as an infantry platoon leader given the job of converting an unwilling group of draftees into a well honed fighting team during an unpopular war!

Rich and demanding leadership situations which can be studied effectively are hard to find. The author was struck by the potentialities of ROTC Summer Camp. Numerous participants are well motivated to give their best efforts under the careful scrutiny of rating officers and peers. Problem situations with which they must deal are authentic and challenging, yet relatively standardized. Consequently, a sufficient sample of leaders performing essentially the same mission can be described and evaluated. And similar personnel doing similar things in subsequent summers provides opportunity for replication and model testing. However, an important limitation may be posed by the relatively brief

period of time in which each cadet occupies a given leadership role. This may distort the relative importance of various leader behaviors as is discussed later in this report.

## METHOD

### Subjects

The study was made possible by the support and active assistance of Colonel Charles McKeown, Commandant of the 1973 ROTC Summer Camp at Fort Bragg, North Carolina, and his staff. They supervised the administration of a Modified Leader Behavior Description Questionnaire to 583 senior cadets who described ideal leader behavior and actual behavior of 104 acting platoon leaders who participated in one of the most realistic and challenging exercises of the summer program. This entailed leading a reconnaissance patrol where contact with the enemy was assured. Leaders included for study led either the assaulting platoon which was air dropped by helicopter two or three miles from likely enemy activity, or the defending enemy platoon which hoped to ambush the assaulting group.

In addition, Least Preferred Co-worker and self-description data were obtained from the leaders by Colonel McKeown and his staff and three parts of the Early Identification of Management Potential Battery were administered to a small sub-set of the leaders.

### Measuring Instruments And Scores

#### Meyer-Briggs Type Indicator

In a pilot study of 186 cadets who participated in the 1972 Summer Camp, the Meyer-Briggs Type Indicator was administered to a subgroup of these cadets. Failure to obtain meaningful correlations between any of the various scores

generated with it and LPC, self-description, performance and other scores contributed to the decision to drop it for the present study.

#### Early Identification of Management Potential Battery

Through the assistance of Charles P. Sparks, Parts B, J, and T of the Early Identification of Management Potential Battery were made available. Due to unavoidable difficulties it was possible to administer these to only 38 leaders.

#### Fox LPC, Self-Description Instrument

The Fox LPC, Self-Description Instrument (see Appendix A) was designed to provide a comprehensive survey of personal attributes and behavior, using a format patterned after Osgood's Semantic Differential (1952). The development work for the instrument drew heavily upon factor and comparative analyses of Tupes and Christal (1961). A detailed discussion of its development and testing is provided in Fox (September 1974). In addition to its inclusiveness as to behavioral coverage, a unique attribute is a provision in the instructions which permits respondents to indicate which midpoint checkmarks represent serious doubt or insufficient information.

Some of the scales have clearly "favorable-unfavorable" connotations, others do not. Scale scores range from 5 - 85 (as indicated below) with favorable ends being scored high. For those scales which have no clearly "favorable" end (scale 2 for example) the high end is arbitrarily assigned. High ends for scales 2, 3, 5, 6, 7, 8, 11, 12, 15, 18, 21, 25, 27, and 29 are to the right, all others to the left.

80	70	60	50	40	30	20	10	
:	:	:	:	:	:	:	:	:
85	75	65	55	45	35	25	15	5

### Least Preferred Coworker Scores

Since a high LPC score signifies that a respondent views his least preferred coworker favorably and a low score indicates an unfavorable view, only those scales with clear-cut "favorable-unfavorable" connotations may be used in computing LPC scores.

Three LPC scores for leaders were computed in terms of the means of the items indicated below. Mean rather than total scores were computed to accommodate missing data. The items were picked on the basis of past research (see Fox September 1974)

Task LPC - Mean of scales 4, 5, 13, 14, 17, 18, 25, and 31.

Social LPC - Mean of scales 1, 3, 7, 11, 15, 20, 21, and 28.

LPC - Mean of scales 1, 3, 4, 7, 8, 9, 11, 12, 14, 20, 21, 26, 28, and 29.

Also, a Difference Score was computed (Social LPC - Task LPC).

### Self-Description Scores

In addition to describing their least preferred coworkers, leaders described themselves on a second copy of the Fox LPC, Self-Description Instrument. An overall Self-Description Score was obtained by computing the mean of scales 1, 3, 4, 9, 10, 14, 17, 18, 19, 20, 22, 25, 28, and 31.

### Modified Leader Behavior Description Questionnaire

This instrument is presented in Appendix B. The first 54 items were selected from the 100 items of Form XII of the Ohio State 1962 Leader Behavior Description Questionnaire. The author is indebted to Ralph M. Stogdill for his guidance, based upon extensive research, as to which items to retain in the preparation of this shortened version. With the assistance



of Colonel McKeown and his staff the author then modified the language of five items to make them more compatible with the practices and situations associated with ROTC Summer Camp. The following changes were made:

Original Item - "He is working hard for a promotion"...Changed To - "He is working hard for good ratings"

Original Item - "He decides what shall be done and how it shall be done"... Changed To - "He unilaterally decides how things should be done when he reasonably could consult with his men"

Original Item - "He enjoys the privileges of his position"...Changed To - "He misuses his authority"

Original Item - "He backs down when he ought to stand firm"...Changed To - "He backs down when he ought to stand firm in dealing with his troops"

Original Item - "He acts without consulting the group"... Changed To - "On occasions when it is practical to do so he explains the reasons for his orders, requests, or instructions"

All 54 items were scored 1-5 so that a high score is favorable (therefore, for some items 5 represents the "Never" rather than the "Always" end of the scale.) The author added questions 55-60 to get at other aspects of behavior not specifically covered by the first 54 questions. Thirteen point scales with extreme end and midpoint adjectives are provided for these questions as indicated in Appendix B.

#### Descriptive Scores

Cadet platoon members were asked to describe the actual behavior of the platoon leaders under whom they served for the period of the field exercise. Data were analyzed both as individual respondent scores and as averaged respondent scores for each leader. The averaged data yield more definitive correlational and factor analysis data. Apparently, a gain in descriptive reliability from pooling more than offsets any loss due to non-reflection of differential leader behaviors with individual respondents. This is not always the case, as is reported by Kerr and Schriesheim (1974) in their survey of the literature. In the present study the team-oriented nature of the exercise and the limited period of leadership service associated with it (24 hours) may have seriously limited opportunities for differentiation



### Behavioral Area Scores

Average scores and their standard deviations for the following question subsets were computed to obtain Behavioral Area Scores for leaders as indicated:

Initiating Structure - Mean of questions 3, 7, 11, 17, 29, 34, 41, and 52  
Consideration - Mean of 5, 9, 13, 19, 23, 37, 43, and 54  
Decisiveness - Mean of 4, 8, 18, 22, 30, 36, and 42  
Goal Emphasis - Mean of 2, 14, 24, 44, and 51  
Support - Mean of 5, 9, 19, 26, 31, 35, 37, and 56  
Consultative Participative Decision-Making - Mean of 11, 12, 13, 21, 23, 43, 47, 59, and 60  
Work Facilitation - Mean of 3, 8, 10, 13, 17, 20, 27, 29, 34, 39, 41, 45, 48, 54, 57, and 58

For a detailed discussion of the rationale for selecting these dimensions and the specific items which comprise them, see Fox (March 1974).

### Normative Scores

The following instruction appears after question 54 of the Modified LBDQ:  
YOU HAVE CIRCLED WHAT THE LEADER DOES FOR EACH ITEM. NOW, GO BACK AND UNDERLINE THE ANSWER LETTER THAT CORRESPONDS WITH WHAT YOU THINK A LEADER SHOULD DO FOR EACH ITEM (this entailed use of the same 5 point scale as for descriptive responses). Means and standard deviations were computed for these normative data.

### Criterion Measures

Three criteria were used for differentiating High Performance Leaders from Low Performance Leaders: Subordinate Cadet Ratings, Peer Ratings, and a Leader Potential Index. The intercorrelations among these three are presented in Table 1.

Good leaders were defined as those who exceeded at least two of the following

three cutting scores: Subordinate Cadet Ratings (9.5), Peer Ratings (106), and Leader Potential Index (104), with the third at least near the cutting point. Poor leaders were defined as those who fell below at least two of the three. These cutting scores represent midpoints, or positions slightly above midpoints, for their respective distributions.

The resulting means and standard deviations for High and Low Performance Leaders on the three criteria are presented in Table 1-A, along with means and standard deviations for all leaders and "t" values for high-low differences. As can be seen in Table 1-A, resulting mean differences between High and Low Performance Leaders on all three criteria are highly significant. In fact, no score overlap occurs for the three when one standard deviation is subtracted from the high mean and one standard deviation is added to the low mean.

The criteria scores are not completely independent of each other, as is explained below; however, data in Tables 1 and 1-A coupled with the nature of these scores suggest that--in concert--they provide a highly valid criterion of success. The most important point is that this resulting criterion is largely independent of the descriptive data generated with the Modified Leader Behavior Description Questionnaire. Only Subordinate Cadet Ratings were made by the same respondents at the same time. Peer Ratings were made by some of the same personnel, but at a different point in time and in a different frame of reference. And ratings for four of the five factors comprising the Leader Potential Index were made by completely separate non-student Army personnel.

#### Subordinate Cadet Ratings

Subordinate Cadet Ratings were obtained from Question 61 of the Modified Leader Behavior Description Questionnaire, "How do you rate this man's overall

performance as a leader?," which provides a thirteen point scale ranging from "Best Possible" to "Poorest Possible." Platoon members were asked to answer the questions about their platoon leaders shortly after completion of the special field exercise. Scores for Question 61 ranged from 3.75 - 12.50, with a mean of 9.06 and standard deviation of 3.25.

#### Peer Ratings

During the fifth week of Summer Camp each cadet was asked to pick the ten cadets in his platoon he would most like to have as leaders in combat, and the ten he would least like to have as leaders. Peer Ratings were derived from these and expressed in standard score form to adjust for different rating distribution characteristics across the platoons. For the leaders included in this study Peer Ratings ranged from 58 - 144, with a mean of 103.74 and standard deviation of 21.05.

These ratings provide a realistic reflection of leadership abilities as has been shown by a number of studies. In a more recent one, an impressive level of validity for trainee ratings similar to those used in this study to predict promotion to NCO and officer in the Israel Defense Forces is reported by Amir, Kovarsky, and Sharan (1970). They provide a useful list of references to older studies.

#### Leader Potential Index

This index in standard score form comprises five equally weighted scores: Peer Ratings (discussed above), Job Performance Ratings, Personal Characteristics Ratings, Situation Ratings, and Field Problems Ratings. The latter four ratings were made (as discussed below) by Army Platoon Evaluation Officers assigned to

the Summer Camp. For the cadets described as leaders in this study Leader Potential Index ratings ranged from 63 - 142, with a mean of 104.06 and standard deviation of 15.88.

#### Job Performance Ratings

During the Summer Camp there were six jobs which cadets could assume temporarily: Company Commander, Company Executive Officer, Company First Sergeant, Platoon Leader, Platoon Sergeant, and Squad Leader. All of the cadet leaders described in this study served as platoon leaders for the same special field exercise. All of them served, also, one or more times as squad leader. Many served as Platoon Sergeant and about a third served in one or more of the other three jobs. The Platoon Evaluation Officer rated cadet performance in each job on ten factors, using a seven degree scale. The Job Performance Rating is a composite of ratings for all jobs held by the cadet during the Summer Camp period.

#### Personal Characteristics Ratings

Based upon observation during Summer Camp, The Platoon Evaluation Officer rated each cadet on fifteen characteristics, using a seven degree scale. Typical of the characteristics are: "Cooperates well with superiors," and "His appearance and bearing cause people to react positively."

#### Situation Ratings

The Platoon Evaluation Officer was asked to visualize and rate each cadet in the Platoon in six hypothetical "situations," again, using a seven degree scale. Typical of the situations are: "Represent you in a meeting where considerable tact and ability to get along with people are required," and "Be responsible in an emergency situation calling for great initiative, coolness,

and dominant leadership."

Field Problem Ratings

Cadets participated in one or more special field problems during Summer Camp. These ratings were made by an officer other than the cadet's Platoon Evaluation Officer on ten factors, using a seven degree scale. Like the other ratings comprising the Leader Potential Index, these were computed in standard score form prior to combination to produce the Index.

## RESULTS

### The Normative Leader

Cadets were asked to describe how leaders should behave with regard to the first 54 questions of the Modified Leader Behavior Description Questionnaire of Appendix B. Means and standard deviations for their responses are presented in Table 2.

In looking through Table 2 it is interesting to note those items for which there are high scale values (toward "Always") coupled with relatively high agreement among respondents as indicated by low standard deviations. These are presented in Table 3. It is striking that only two or three of the eleven items presented could be labeled as "consideration" or "support" types of behavior. The major emphasis is upon "initiating" and "structuring" types of behavior.

It is provocative, also, to look through Table 2 for items which were not accorded as high normative scale values or as much respondent agreement. Table 4 presents seven of these. When we contrast the means and standard deviations with those for items in Table 2 generally, and especially with those in Table 3, we see relatively less enthusiasm for and more uncertainty about the appropriateness of egalitarian, consultative practices.

### Factor Analyses

#### All Respondents

Factor analysis determines which MLBDQ normative scores covary together and are relatively independent of the other normative scores. Factor loadings represent the correlation of the individual item score with the factor. The Guertin and Bailey (1970) library of factor analytic programs provided Varimax



and Simple Loadings (primary) factor rotations. Iterated communalities were used in the diagonals of the correlation matrix to give principal axes. In all analyses multiple trial rotations were made with different numbers of principal axes. Final selection of the number of factors rotated was based upon considerations summarized in Guertin and Bailey (1970, p. 121).

Table 5 presents factor loadings for the nine factor solution of normative data from 213 respondents as to how leaders should behave. The sum of squared loadings for each rotated factor is presented at the bottom of each factor column. This sum divided by 54 (the number of MLBDQ items for which there are normative scores) gives the percentage of total score variance accounted for by the factor. Item numbers on the left correspond with the first 54 items of Appendix B. The percentages of total score variance and common score variance accounted for by the nine factor solution are indicated at the bottom of the table. Loadings for items which appear to be relatively unique to a factor (the loading explains at least twice as much variance as any loading for the other four factors) and are sufficiently high (.50 or better) to warrant attention are underlined. Negative loadings are apparent for many items due to the way they are worded (see Appendix B), whereby a low score is a favorable response.

Factor 1 is labeled Consultative-Participative Decision-Making. The items which comprise it are "puts suggestions made by group into operation," "trusts members to exercise good judgment," "encourages initiative in group members," and "tries out his ideas in the group."

Factor 2 is labeled Decisiveness. Items comprising it are "doesn't misuse authority," "takes necessary action," "not leader in name only," and "does not back down when he ought to stand firm in dealing with his troops."

Factor 3 is labeled Stable - Confident. Items comprising it are "can wait, does not blow up," and "not hesitant about taking initiative in the group."

Factor 4 is labeled Goal Emphasis - Work Facilitation. Comprising it are "sees to it that work of group is coordinated," "keeps group working together," "acts as spokesman of group," "pushes for increased efficiency," "encourages use of uniform procedures," "lets group members know what is expected of them," and "makes pep talks to stimulate the group."

Factor 5 is a single item factor, "can inspire enthusiasm for a project," which is essentially self-labeling, as is the single item Factor 6, "permits the group to set its own pace."

#### High Versus Low Stress Respondents

A break-out of High and Low Stress Respondents was made on the basis of data from Question 62 of the MLBDQ (Appendix B). The question presents a thirteen point scale "Never" to "Always" with the statement, "During this summer camp I have felt threatened by pressure or stress." The distribution of responses to this question was skewed to the Low Stress or "Never" end of the scale, consequently, High Stress Respondents were defined as those who checked anywhere from "Always" five spaces back along the scale toward the middle, and Low Stress Respondents as those who checked "Never" and one space back from it toward the middle.

First, mean differences for the 54 MLBDQ questions were subjected to t tests. Only three were significant at the 5% level or better. In comparison with Low Stress Respondents, High Stress Respondents described their ideal leader as more often "putting suggestions made by the group into operation" (5%), "having things turn out as he predicts more often" (5%), and "worrying more about the outcome of any new procedure" (1%). Of course, this finding should be discounted by the expectation that approximately three Type I errors would be expected from this number of tests at the 5% level.

Since not one of the three "significant difference" items (items 13, 25, and 50) appears in the factor structure of data for either group with a loading

of at least .50 and independence, differences in factor structure for Low Stress and High Stress Respondents reflect primarily conceptual and not level differences between the two groups. Level-wise, the normative data presented in Table 2 are reasonably applicable to both groups.

Results of the factor analysis of High Stress Respondent data are presented in Tables 6A and 6B and those for the factor analysis of Low Stress Respondent data are presented in Tables 7A and 7B. As the 17 factor solution in both parts of Table 7 in contrast with the 14 factor solution in both parts of Table 6 shows, Low Stress Respondents differentiated normative descriptive items from each other far more than High Stress Respondents. Comparison reveals little agreement by the two groups of respondents as to which attributes or behaviors belong with each other in conceptualizing the ideal leader. This lack of agreement constitutes a significant limitation on our ability to generalize the results of the factor analysis of the combined data reported in Table 5.

Table 8 helps to clarify the differences. First, we see three MLBDQ items (48, 45, 6) which were common to factors in both analyses. From Table 2 we see that the scale levels for all three were only one-fourth of a scale interval away from "Always." Together, they suggest strong "problem-solving" ability on the part of the ideal leader. But then an interesting difference occurs, Low Stress Respondents associate this problem-solving ability with ability to inspire enthusiasm, but High Stress Respondents associate it at the level of acceptance with eight other structuring-type behaviors. And Low Stress Respondent Item 51 is omitted as a meaningful item in both this and all other factors by the High Stress Respondents. Conversely, Items 27, 34, 41, and 44 of the High Stress factor do not appear in any of the Low Stress factors!

Item 8 "takes necessary action" is associated with the other seven items on the High Stress side. For the Low Stress analysis, however, we see in Table 7 that Item 8 is associated only with 22 "leader in fact, not just in name" and 26 "doesn't misuse authority". Also, Item 26 is unique to the Low Stress analysis, it does not appear in any of the High Stress analysis factors as a primary item.

Item 39 "sees that work of group is coordinated" is part of the same factor with Item 8. We see in Table 7, however, that it is associated only with 23 "gives advance notice of changes" by Low Stress Respondents. Factor 7 of Table 6A, comprising Items 52 "asks members to follow standard rules and regulations" and 24 "pushes for increased efficiency", is unique to High Stress Respondents. Neither item appears at the level of acceptance in Table 7.

These differences, coupled with others presented in Table 8, suggest quite different types of conceptual elaboration upon the "core" items common to both factor analyses. High Stress Respondents elaborate by adding more activities for the leader of an "initiating," "being-in-charge" type. Low Stress Respondents elaborate with "collaboration--consideration" type items.

It's as if Low Stress Respondents are saying "yes, we all agree that we want an able, conscientious leader, but one with a healthy regard for our abilities and wishes." Only they associate "is leader in fact, not just name" with "doesn't misuse authority" and "doesn't back down when he ought to stand firm" with "looking out for personal welfare of group members," and "getting superiors to act for their welfare." High Stress Respondents, apparently, feel less need to associate such humanizing or restraining concepts with the more assertive ones which are common to both analyses.

These differences appear to be in line with the findings of Halpin (1957)

and Mulder and Stemerding (1963). They report that the satisfaction of a leader's men with his directive behavior is moderated by the presence of external threat. In a controlled experiment involving students, Rosenbaum and Rosenbaum (1971) found that autocratic leadership was more productive under stress conditions, democratic leadership more productive under non-stress conditions.

#### Actual Leader Behavior

Cadets were asked to describe how leaders actually behaved with regard to the first 61 questions of the Modified Leader Behavior Description Questionnaire of Appendix B. Every leader was described by a number of respondents under his leadership. Means and standard deviations of the averaged responses for each leader are presented in Table 2. Normative data for the first 54 questions are presented in Table 2, also, so that comparisons may be made between actual and normative levels. It is interesting to note the tangible shortfalls of actual from normative behavior for the first 54 with the exception of Questions 14, 15, 19, 38, 50, and 53. Intercorrelations among the averaged descriptive data for leaders on all 61 items are presented in Table 9.

#### Factor Analyses

##### All Respondents

Table 10 presents factor loadings for the nine factor solution of averaged descriptive data for the 62 items in Appendix B from 583 respondents about 104 leaders, along with percentages of total score variance and common score variance accounted for. Loadings of .50 or better for items which are relatively independent of other factors are underlined.

Factor 1 is labeled Considerate and Conscientious Problem-Solver, Organizer, and Communicator. The items which comprise it are "asks members to follow



standard rules and regulations," "drives hard when there's a job to be done," "makes sure that each member's part in the group is understood," "sees that work of group is coordinated," "is working hard for good ratings," "assigns members to particular tasks," "is a very persuasive talker," "gives advance notice of changes," "looks out for the personal welfare of group members," "treats all members as his equal," "encourages the use of uniform procedures," "anticipates problems and plans for them," and "schedules the work to be done."

Factor 2 is labeled Effectively in Charge Under All Conditions. Comprising it are "not hesitant about taking initiative in the group," "takes full charge in emergencies," "doesn't back down when he ought to stand firm," "can reduce a madhouse to system and order," and "things usually turn out as he predicts."

Factor 3 is called Supportive, Consultative-Delegative Mediator. Items comprising it are "encourages initiative in group members," "does little things to make it pleasant to be a member of the group," "settles conflicts when they occur," and "consulted with group members and encouraged their participation when they wished for him to do so."

Factor 4 is labeled Sets and Maintains Pace. It comprises "doesn't permit group to set own pace," "doesn't permit members to take it easy," and "lets group members know what is expected of them."

Factor 5 is called Trusting, Loose-Rein Approach. The items comprising it are "allows members freedom of action," "doesn't misuse his authority," and "trusts group members to exercise good judgment."

Factor 6 comprises "isn't unilateral when he reasonably could consult with members," and "doesn't worry about the outcome of a new procedure," and is labeled Consultative, Unworried.

Factor 7 is a single item factor, "doesn't let members take advantage of



him," which is essentially self-labeling.

#### High Versus Low Stress Respondents

A break-out of High and Low Stress Respondents was made on the same basis discussed earlier for analyzing normative data (through the use of Question 62 responses), to determine if High Stress Respondents conceptualize actual leader behavior differently than Low Stress Respondents. To avoid confounding, this break-out included only leaders for whom descriptive data from the same number of both High and Low Stress Respondents were available. This resulted in descriptive data from 91 High Stress Respondents and 91 Low Stress Respondents.

Mean differences for the first 61 questions of the MLBDQ were subjected to t tests. Only five were significant at the 5% level or better. In comparison with High Stress Respondents, Low Stress Respondents described the same leaders as more often "acting as spokesman of the group" (5%) and more often "trying out his ideas in the group" (5%). On the other hand, High Stress Respondents found the same leaders more often "giving too little direction" (5%) more often "letting group members have authority he should keep" (5%), and more often "letting members take advantage of him" (1%). Again, this finding of so few significant differences should be discounted by the expectation that approximately three Type I errors would be expected from this number of tests at the 5% level.

Nevertheless, it is interesting that the High Stress Respondents observed the same leaders as having their leadership encroached upon and as giving too little direction more often than Low Stress Respondents saw this. This is consistent with the implications of the factor analyses of normative data from High and Low Stress Respondents discussed earlier, that High Stress Respondents have a greater preference for a unilateral, assertive style on the part of their leaders.

Since all but five of the 61 items describing leaders which appear in the factor analyses are associated with insignificant level differences, the differences in factor structure discussed below are due primarily to conceptual differences between High and Low Stress Respondents.

Table 11 presents factor loadings for the nine factor solution of descriptive data about their leaders from 91 High Stress Respondents, along with percentages of total score variance and common score variance accounted for. Loadings of approximately .50 or better for items which are relatively independent of other factors are underlined as before. Table 12 presents similar data about their leaders from 91 Low Stress Respondents.

The conceptual differences reflected in the association of descriptive items by High Stress Respondents in comparison with Low Stress Respondents are striking. Table 13 highlights these differences. Common factor items produced by both factor analyses are shown, along with those additionally associated with the common items by either the High Stress or Low Stress Respondents alone.

High Stress Respondents associated fewer of the 61 questionnaire descriptive items with each other than did Low Stress Respondents (27 items versus 45) with .50 or higher loadings and relative item independence. Also, they more completely differentiated from each other the ones they did use. For example, Factor 1 of the Low Stress analysis encompasses many items of Factors 1, 2, 5, 6, and 7 of the High Stress Analysis. Low Stress Factor 2 encompasses elements of Factors 1 and 4 of the other analysis. These differences are detailed further in Table 13.

The tendency of High Stress Respondents to more fully differentiate actual descriptive data than Low Stress Respondents is in direct contrast with their opposite tendency, discussed earlier, with regard to normative data! It's as if Low Stress Respondents were more discriminating in the abstract process of describing

an ideal leader, but more relaxed and less discriminating observers in dealing with actual leader behavior.

As was the case with the analyses of normative data, the lack of agreement in the analyses of actual data from High and Low Stress Respondents seriously limits any generalization from the analysis of combined data reported in Table 10.

#### High Versus Low Performance Leaders

The procedure for distinguishing High Performance Leaders from Low Performance Leaders was discussed earlier in the section on Criterion Measures. It produced samples of 46 High Performance Leaders and 42 Low Performance Leaders. Means and standard deviations of the averaged descriptive data (averaged for each leader from a number of respondents) for the first 60 questions of the MLBDQ are presented in Table 2, along with t values for the mean differences between High and Low Performers.

#### Significant Differences

##### Respondent Data and Leader Self-Description Data

Forty-six of the 60 differences for High and Low Performance Leaders in Table 2 are significant at the 5% level or better, with 37 of these exceeding the 1% level and 27 exceeding the .001 level. Clearly, High Performance Leaders are distinguished behaviorally from Low Performance Leaders on the basis of data obtained with the Modified Leader Behavior Description Questionnaire. When we combine these findings with the significant differences in Leader-Self Descriptions presented in Table 14, we obtain good portraits of High and Low Performance Leaders. Self Descriptions were obtained with the Fox LPC, Self-Description Instrument (see Appendix A).

In terms of personal characteristics, Low Performance Leaders appear to

have lower achievement motivation than Average Leaders. Respondents describe them as being significantly below average in pushing for increased efficiency, driving hard when there is a job to be done, and in working hard for good ratings or in looking for sound opportunities to show what they can do. They describe themselves as being significantly less energetic and gung-ho than High Performance Leaders, and appear to be less stable emotionally than Average Leaders.

Respondents describe them as being significantly less able to tolerate postponement and delay than Average Leaders, and they describe themselves as being significantly less cheerful than High Performance Leaders describe themselves. It seems, also, that they have less confidence than Average Leaders. Respondents characterize them as having a greater tendency to over-consult, as being more likely to let others have authority they should keep, and as being less likely to take charge in emergencies than Average Leaders. They describe themselves as being less poised and tough, less bold and self-assured, and less independent than High Performance Leaders describe themselves.

In addition, Low Performance Leaders describe themselves as being less approachable and sociable, less considerate and mature, less interesting, and less efficient than High Performance Leaders describe themselves.

These characteristics are associated with below average planning, directing, and support behavior on the part of Low Performance Leaders. Respondents report significantly below average anticipation of problems and planning ahead for them, below average handling of complex problems and communication of ideas and instructions, and below average effort to get superiors to act for the welfare of group members.

Lastly, Low Performance Leaders are below average as motivators. Respondents say they are significantly below average in persuasiveness and ability to inspire

enthusiasm, and that they resort to significantly more than average use of threats and punishment in trying to motivate group members.

For all of the above Self-Description characteristics, High Performance Leaders describe themselves in significantly more positive terms...as being more efficient, cheerful, interesting, energetic, independent, bold and self-assured, approachable and sociable, considerate and mature, and poised and tough than Low Performance Leaders describe themselves.

Compared with Average Leaders, respondents describe High Performance Leaders as having higher achievement motivation, and as being better motivators and directors of activity, even under stress. They see them, also, as being significantly above average in confidence, decisiveness, and "being in charge."

High Performance Leaders display above average ability in standing firm when they should, taking necessary action, and in persuading others that their ideas are to their advantage. More than the Average Leader, they speak from strong inner conviction, encourage initiative in group members, and keep their groups working together.

All of the differences for High and Low Performance Leaders discussed above which are based upon respondent data are significantly different from Average Leader behavior at the 5% level of significance or better. Most differences are decidedly more significant when derived from High versus Low Performance means. These findings are summarized in Table 15.

Though High Performance Leaders were significantly better than Low Performance Leaders in all of the respects discussed above, they still fall short appreciably of "ideal" levels for many of the behaviors as prescribed by respondent normative data. A summary of the largest shortfalls of actual from normative leadership behavior for both Average and High Performance



Leaders (based upon data in Table 2) is presented in Table 16.

Normative data were not obtained for MLBDQ items 55-60, but it is interesting to compare the descriptive scores for them with what the normative scores presumably would have been. Referring to Table 2 we see that High Performance Leaders were well above the scale midpoint of "neither particularly" toward "looking for sound opportunities to show what they could do" on Question 55, "I would describe this leader as being most concerned with:" Average Leaders were closer to the midpoint, but on the same side. Presumably, a normative score for this question would have been close to a scale value of 13.

High Performance Leaders, along with All Leaders, were seen as using "threats and punishment" about equally with "promises and rewards" to get performance (Question 56), though High Performance Leaders were significantly higher in the use of promises and rewards. As we will see, this item did not turn up as a key predictor of success in relation to a Consolidated Performance Score, though the correlation of .41 is significant. It is difficult to presume what a normative score would have been. The very limited reward power of leaders in this study and the brevity of their service as platoon leaders may have seriously limited the potentialities of positive motivation.

With regard to Question 57, respondents saw no significant differences between All Leaders and High and Low Performance Leaders. All were perceived as giving too much direction almost half the time! Assuming a normative score of "never," this constitutes one of the biggest shortfalls between actual and normative behavior.

For Question 58, High Performance Leaders did a significantly better job of "providing adequate direction" than Low Performance Leaders, with a score of 10 compared to a presumably ideal score of 13. Respondents describe Low Performance



Leaders as providing adequate direction only slightly more than half of the time.

A dramatic shortfall for all leaders, without differentiation, is in the area of "consulting with group members and encouraging their participation when they would have liked for this to occur" (Question 59). All were described as doing this only about half of the time. Yet, this item does not correlate significantly with the Consolidated Performance Score. Perhaps, the nature of the leadership exercise along with associated time pressures effectively precluded a more important role for this type of behavior.

Question 60 asks how often leaders "over-consulted by attempting to obtain group member participation when they preferred non-participation". Both Low and High Performance Leaders were perceived as over-consulting roughly one-fourth of the time, though High Performance Leaders did it significantly less. This finding is of particular interest in view of the data for Question 59 which indicate that leaders were appropriately consultative only about half the time. It seems likely that leaders were not sufficiently aware of important individual or situational differences in this regard. A correlation of .34 between Question 60 scores and Consolidated Performance Scores is significant.

We do have one normative score that relates to leader consultative behavior and provides important qualification to the discussion above. For Question 21 respondents indicate that ideally "leaders should not unilaterally decide how things should be done when they reasonably can consult with their men" only little more than half of the time! There is obvious disagreement, however, as to the "degree of unilateralness" felt to be appropriate as reflected in the fact that the standard deviation of 1.27 for Question 21 normative responses is second largest of those obtained for all normative scores. Clearly, there is doubt as to the desirability of consultative behavior, per se, even when conditions reasonably will permit it.

### Behavior Areas

Seven Behavior Area Scores were obtained by computing average scores of various question subsets from the Modified Leader Behavior Description Questionnaire as was discussed earlier. Table 17 presents normative and descriptive scores for All Leaders in addition to scores for High and Low Performance Leaders.

The biggest and most significant mean difference between High and Low Performance Leaders is for Goal Emphasis Behavior. Next is Decisiveness, then Work Facilitation, and last in the higher group is Initiating Structure. The smallest differences, though still significant, are for Consideration, Consultative Participative Decision-Making, and Support.

In the discussion of the characteristics of The Normative Leader it was noted that only two or three of eleven items in Table 2 with high scale values (toward "Always") and relatively high respondent agreement (reflected in lower standard deviations) can be labeled as "consideration" or "support" types of behavior. The major emphasis in the remaining eight or nine items is upon "initiating" and "structuring" types of behavior. And normative response data for other items in Table 2 suggest relatively less enthusiasm for and more uncertainty about the appropriateness of egalitarian, consultative practices. Again, we note this trend in the normative data for the seven Behavioral Areas.

Three of the Behavioral Area Scores incorporate thirteen point scale items along with five point items in the proportions indicated: Support (one of eight items), Consultative Participative Decision-Making (two of nine items), and Work Facilitation (two of sixteen items). Scores for the thirteen scale point items

must be removed from the mean score computations for these three Behavior Area Scores before we can make meaningful comparisons between actual and normative scores, since we have no normative response data for the thirteen point scale questions. This done, the Normative Mean Scores for the seven

Behavior Areas are:	Decisiveness	4.88
	Work Facilitation	4.70
	Initiating Structure	4.60
	Support	4.50
	Consideration	4.45
	Goal Emphasis	4.32
	Consultative Participative D.M.	4.19

When similar adjustment is made for actual descriptive data and we compare the scores of High Performance Leaders with the adjusted normative scores above, we find that they fall most short of ideal behavior in the areas of Work Facilitation and Decisiveness. These discrepancies are .77 and .74. Those for the other five Behavior Area Scores range from .53 - .59.

#### Physical Fitness

All cadets took a Basic Physical Fitness Test comprising activities such as hand-walking an overhead ladder, push-ups, squat-jumps, wall-scaling, hand-grenade throws, and running a mile. The mean score for 149 cadets was 391.73 with a standard deviation of 49.16. The mean and standard deviation for 59 High Performance Leaders were 411 (39.7) compared with 379 (50.7) for Low Performance Leaders (a difference significant at the .001 level). It is interesting, also, that High Performers are significantly different from All Leaders (at better than the .01 level of significance). The correlation between the Physical Fitness Score and the Consolidated Performance Score is .47 (N = 71, significant at the .001 level).

#### LPC Data

The nature of the four Least Preferred Coworker Scores and the items from the Fox LPC, Self-Description Instrument (Appendix A) which comprise them were

discussed earlier. The Task LPC Score is the mean of eight scores for items which are most work-oriented. The eight items of the Social LPC Score are the most relations oriented, and the Difference Score is obtained by subtracting the Task LPC Score from the Social LPC Score. The LPC Score is the mean of scores for 14 items which the author found (on the basis of many LPC and Self-Description responses) most clearly differentiate "favorableness" from "unfavorableness." Scores for High and Low Performance Leaders, and All Leaders, are presented in Table 18.

Though significant differences in Leader LPC Scores are associated with significant differences in performance (at the 5% level or better), they are not associated with significant differences in leader behavior as measured by the seven Behavior Area Scores. This is particularly striking in view of the data in Table 17 which show significant differences between High and Low Performance Leaders on all seven scores.

However, this inability to obtain behavioral correlates for Leader LPC Scores is resolved dramatically upon the introduction of Leader-Member Relations as a moderator variable! The results are presented in Table 19 and are all the more impressive in view of the small samples left after the breakout of High, Mid, and Low LPC Leaders with Above Average Leader-Member Relations and the same trichotomy for those with Below Average Leader-Member Relations.

As the data in Table 19 show, 26 of the 60 correlations between Leader LPC and descriptive behavioral items of the MLBDQ (Appendix B) and 5 of the 7 correlations with Behavior Area Scores are significant at the 5% level or better. A clear-cut, almost linear relationship between Leader LPC and level of behavior (high score being favorable) emerges for the groups with Above Average Leader-Member Relations. Though most of the significant MLBDQ items show Low LPC Leaders as being more persuasive, assertive, structuring, and committed than High LPC Leaders, it is interesting that Low LPC Leaders also score significantly higher on the Behavior Areas of Support and Work Facilitation.

But this clear-cut pattern disappears when we shift to groups with Below Average Leader Member Relations. A striking aspect, though, is that Low LPC Leaders appear to have retreated from the situation when confronted with Below Average Relations. Of the 26 specific behavior items from the MLBDQ, Low LPC Leaders with poor relations have lower scores than Low LPC Leaders with good relations on all but one. And despite the very small samples involved, 10 of these are significant differences! We see, too, that Low LPC Leaders with poor relations had significantly lower scores than those with good relations on five of the Behavior Area Scores.

#### Possible Predictors of Performance

Table 20 presents correlations between selected leader behavior scores and the Consolidated Performance Score. All of the Behavior Areas are included. Using the MAXR and Forward and Backward options of the SAS Procedure Stepwise Program (with a 5% criterion for predictors to enter and remain), the author evaluated various quadratic, interactive, and additive models for stability in predicting performance from the various behavioral scores. The presence of so many possible predictors coupled with a complete behavioral data sample of only 71 leaders made this undertaking quite speculative at best.

There was no one model which the author could substantially replicate when the sample was randomly split into two samples of 35 and 36. This is not surprising when we consider the expected error variance and the tendency of stepwise procedures to build upon spuriously high correlations.

There are some findings of interest, however. It appears from experimentation with only the seven Behavior Area Scores as predictors that a simple additive model does about as well as more involved ones. For example, Consideration (with a negative B value), Goal Emphasis, Support, and Work Facilitation produce an R of .80. This model was compared with ones incorporating all seven scores squared



(to check for quadratic-type relationships), each multiplied by the other, each multiplied by Leader-Member Relations, and each by Leader-Member Relations and LPC (to introduce interactions) with only nominal gain in variance explained.

As might be expected from the significant moderating effects of Leader-Member Relations on the relationships between Leader LPC and various leader behaviors shown in Table 19, it was found that the addition of the interaction term (Leader-Member Relations X LPC) does enhance the correlation of LPC with Performance. Alone, LPC correlates .34 with the Consolidated Performance Score (N = 50). Addition of the interaction term raises this to .44, a gain of 8% in variance explained.

#### DISCUSSION

Undoubtedly the fruitfulness of this study was made possible in large measure by the high motivation of many cadets, the ability to replicate realistic and challenging leadership situations, and the availability of multi-dimensional performance data. However, considerable caution should be exercised in attempting to generalize the results to dissimilar, non-transient situations. Cadet leaders possessed very limited reward power, and served as study exercise platoon leaders for only 24 hours. There are not many real-life situations as seriously constrained in these regards.

Consultative-participative types of leader behavior were less important to success than were decisive, work-facilitating, goal-emphasizing behaviors. Was this due to the constraints mentioned above? Or, was it the result of inappropriate usage of such behaviors by uncertain cadets? Or was it because such behaviors are basically not as productive in military leadership?

Data from studies such as those reported by Likert (1967, 1973) show that it can be very misleading to view current subordinate performance as a valid index of current leader effectiveness in non-transient situations, due to dramatic lead-lag relationships. It may take anywhere from 6-18 months for positive



changes in leader behavior to produce lasting improvement in subordinate performance and, sometimes, such change is accompanied by deterioration in performance before it stabilizes at new heights. On the other hand, increases in punitive, coercive behaviors can produce immediate improvements in performance which prove to be quite temporary and costly.

Of course, there are many constraints upon the effective use of consultative-participative behaviors with task teams other than limited reward power and time. The author has reviewed the literature in this regard and has integrated his findings in a normative leadership model (Fox, March 1974).

Only well-planned longitudinal studies will ever permit us to determine the true relative importance of key leader behaviors for all but the most transient situations.

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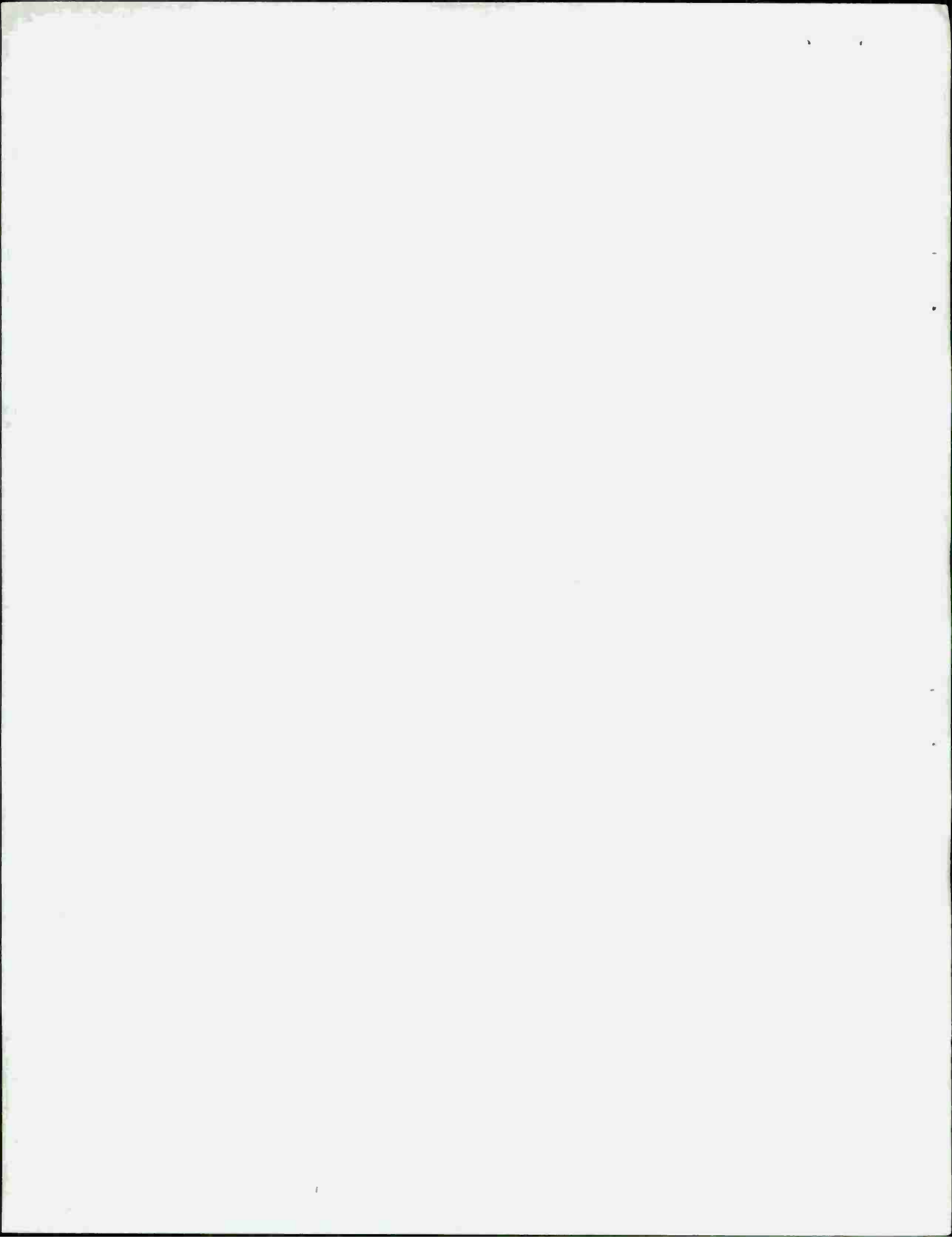


Table 1

## Intercorrelations Among Criterion Scores

(N = 104)

	Subordinate Ratings	Peer Ratings	Leader Potential Index
Subordinate Cadet Ratings	--	.72	.63
Peer Ratings	.72	--	.85
Leader Potential Index	.63	.85	--

Table 1A

## Criterion Score Data For High And Low Performance Leaders

<u>Subordinate Cadet Ratings</u>	Sample Size	Mean Score	Standard Deviation	t	Significant Level
High Performance Leaders	46 Means	10.39	.78		
All Leaders	104 Means	9.00	1.8133		
Low Performance Leaders	42 Means	7.45	1.64	10.4475	.001
<u>Peer Ratings</u>					
High Performance Leaders	59 Means	123.15	10.96		
All Leaders	149 Means	103.74	21.05		
Low Performance Leaders	62 Means	84.50	12.55	17.9176	.001
<u>Leader Potential Index</u>					
High Performance Leaders	59 Means	118.32	10.-		
All Leaders	149 Means	104.06	15.88		
Low Performance Leaders	62 Means	90.43	10.07	15.1156	.001

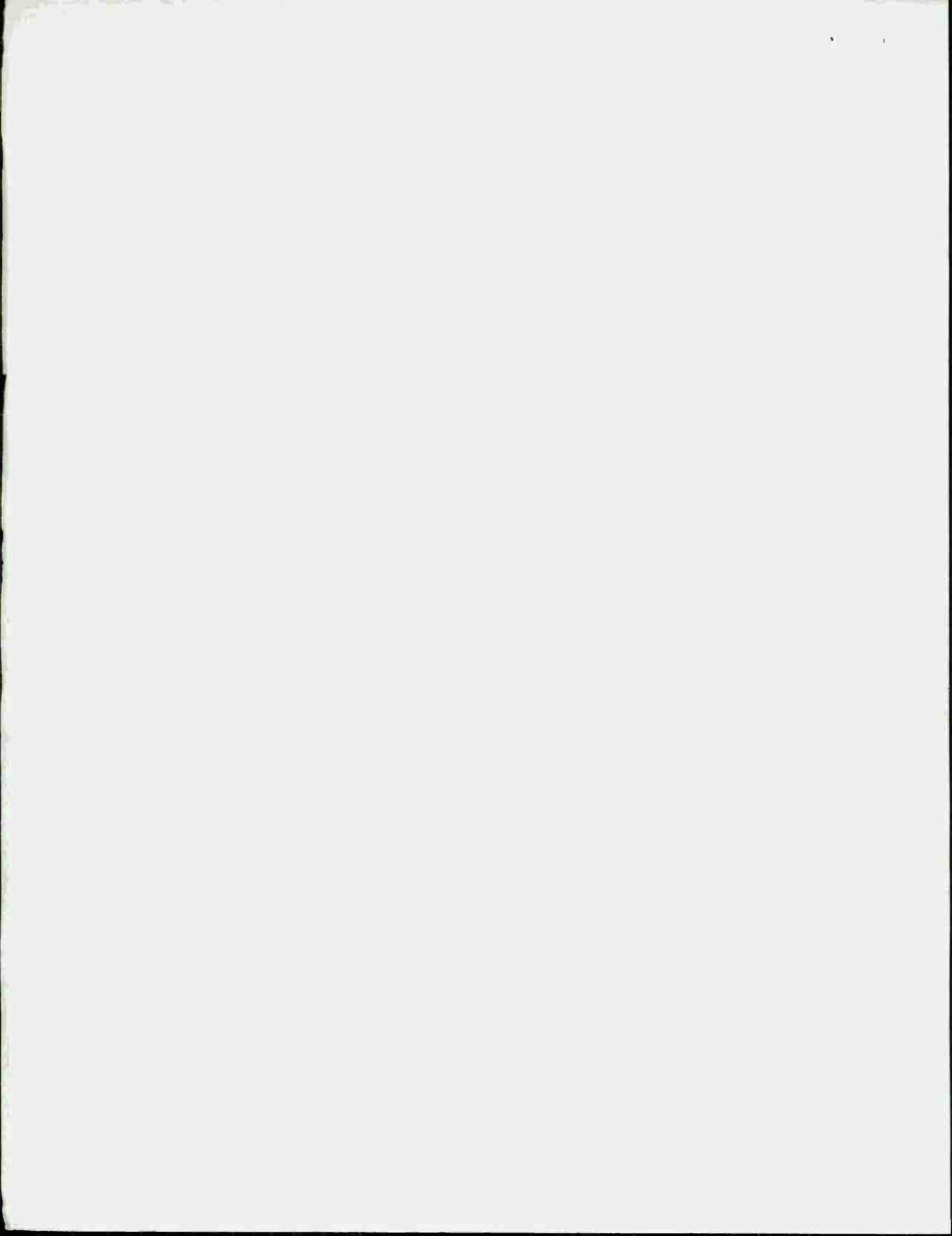




Table 2

Normative and Descriptive Leader Behavior Scores and Standard Deviations  
With High - Low Performance Breakout

		Normative (how leader should be) N=295-353	High Performance Leaders N=46 Means	All Leaders N=104 Means	Low Performance Leaders N=42 Means	t
1.	LEADER ACTS AS SPOKESMAN OF GROUP	4.63(.56)	3.75(.67)	3.58(.66)	3.39(.64)	2.5478
2.	LEADER MAKES PEP TALKS TO STIMULATE GROUP	4.35(.72)	3.45(.41)	3.16(.62)	2.88(.66)	4.7559
3.	LEADER LETS GROUP MEMBERS KNOW WHAT IS EXPECTED OF THEM	4.85(.36)	4.14(.40)	3.86(.61)	3.55(.705)	4.7120
4.	LEADER TAKES INITIATIVE IN THE GROUP	4.69(.83)	3.93(.63)	3.67(.68)	3.41(.65)	3.7601
5.	LEADER IS FRIENDLY AND APPROACHABLE	4.70(.61)	4.33(.56)	4.21(.56)	4.06(.54)	2.2753
6.	LEADER MAKES ACCURATE DECISIONS	4.78(.43)	4.04(.23)	3.82(.46)	3.58(.53)	5.0998
7.	LEADER ENCOURAGES USE OF UNIFORM PROCEDURES	4.50(.66)	3.84(.35)	3.69(.50)	3.52(.56)	3.1422
8.	LEADER TAKES NECESSARY ACTION	4.87(.34)	4.09(.40)	3.84(.59)	3.65(.69)	3.5890
9.	LEADER DOES LITTLE THINGS TO MAKE IT PLEASANT TO BE GROUP MEMBER	4.34(.92)	3.27(.75)	3.16(.70)	2.99(.67)	
10.	LEADER KEEPS GROUP WORKING TOGETHER	4.88(.33)	4.00(.35)	3.77(.52)	3.57(.61)	3.9489
11.	LEADER TRIES OUT HIS IDEA IN THE GROUP	4.10(.73)	3.75(.38)	3.54(.49)	3.34(.52)	4.1416
12.	LEADER ENCOURAGES INITIATIVE IN GROUP MEMBERS	4.57(.64)	3.72(.44)	3.53(.54)	3.33(.58)	3.4873
13.	LEADER PUTS GROUP SUGGESTIONS INTO OPERATION	3.91(.75)	3.57(.48)	3.46(.64)	3.31(.81)	
14.	LEADER NEEDLES MEMBERS FOR GREATER EFFORT	3.06(1.29)	3.10(.61)	2.96(.67)	2.83(.75)	
15.	LEADER IS WORKING HARD FOR GOOD RATINGS	4.10(1.17)	4.07(.43)	3.89(.56)	3.61(.54)	4.3425
16.	LEADER IS VERY PERSUASIVE TALKER	4.50(.67)	3.68(.37)	3.33(.62)	2.95(.70)	5.9624
17.	LEADER MAKES HIS ATTITUDES CLEAR TO GROUP	4.64(.69)	4.21(.36)	3.90(.62)	3.58(.74)	4.9443
18.	LEADER DOES NOT LET SOME GROUP MEMBERS TAKE ADVANTAGE OF HIM	4.80(.61)	4.13(.44)	3.86(.59)	3.63(.665)	4.0705

		Normative	High	All	Low	t
19.	LEADER TREATS ALL GROUP MEMBERS AS HIS EQUALS	4.14(1.21)	3.96(.56)	3.89(.70)	3.74(.87)	
20.	LEADER SETTLES CONFLICTS WHEN THEY OCCUR IN GROUP	4.73(.58)	3.53(.97)	3.47(1.06)	3.25(1.23)	
21.	LEADER DOES NOT UNILATERALLY DECIDE HOW THINGS SHOULD BE DONE WHEN HE REASONABLY COULD CONSULT WITH HIS MEN	3.48(1.27)	3.09(.52)	3.17(.51)	3.21(.52)	
22.	LEADER IS NOT LEADER IN NAME ONLY	4.81(.63)	4.29(.47)	3.95(.65)	3.64(.68)	5.1090
23.	LEADER GIVES ADVANCE NOTICE OF CHANGES	4.64(.61)	3.74(.70)	3.57(.83)	3.34(.96)	2.1897
24.	LEADER PUSHES FOR INCREASED EFFICIENCY	4.68(.53)	4.15(.38)	3.75(.61)	3.40(.62)	6.7035
25.	THINGS USUALLY TURN OUT AS LEADER PREDICTS	4.34(.65)	3.66(.70)	3.47(.71)	3.19(.73)	3.0539
26.	LEADER DOES NOT MISUSE HIS AUTHORITY	4.93(.26)	4.41(.53)	4.29(.63)	4.09(.73)	2.3070
27.	LEADER HANDLES COMPLEX PROBLEMS EFFICIENTLY	4.74(.47)	3.77(.68)	3.52(.90)	3.14(1.09)	3.1823
28.	LEADER IS ABLE TO TOLERATE POSTPONEMENT AND UNCERTAINTY	4.37(.98)	3.86(.41)	3.69(.68)	3.42(.88)	2.9250
29.	LEADER ASSIGNS GROUP MEMBERS TO PARTICULAR TASKS	4.72(.59)	4.32(.36)	4.13(.50)	3.92(.58)	3.8103
30.	LEADER DOES NOT BACK DOWN WHEN HE OUGHT TO STAND FIRM IN DEALING WITH HIS TROOPS	4.86(.49)	4.30(.58)	4.09(.73)	3.86(.88)	2.7168
31.	LEADER GETS HIS SUPERIORS TO ACT FOR THE WELFARE OF GROUP MEMBERS	4.55(.85)	3.67(.68)	3.36(.88)	3.10(.91)	3.2690
32.	LEADER IS PATIENT, DOES NOT BLOW UP	4.74(.61)	4.20(.52)	4.08(.71)	3.91(.87)	
33.	LEADER SPEAKS FROM A STRONG INNER CONVICTION	4.42(.86)	3.64(.47)	3.34(.67)	3.07(.76)	4.1447
34.	LEADER MAKES SURE THAT HIS PART IN THE GROUP IS UNDERSTOOD BY THE GROUP MEMBERS	4.83(.41)	4.10(.38)	3.87(.58)	3.60(.70)	4.0632
35.	LEADER ALLOWS GROUP MEMBERS FREEDOM OF ACTION	4.06(.92)	3.69(.63)	3.63(.67)	3.53(.73)	

		Normative	High	All	Low	t
36.	LEADER DOES NOT LET SOME MEMBERS HAVE AUTHORITY HE SHOULD KEEP	4.58(.79)	4.04(.45)	3.79(.56)	3.49(.57)	4.9552
37.	LEADER LOOKS OUT FOR PERSONAL WELFARE OF GROUP MEMBERS	4.81(.41)	4.05(.73)	3.96(.69)	3.85(.69)	
38.	LEADER DOES NOT PERMIT GROUP MEMBERS TO TAKE IT EASY IN THEIR WORK	3.40(1.04)	3.32(.48)	3.13(.59)	3.03(.67)	2.2877
39.	LEADER SEES TO IT THAT WORK OF GROUP IS COORDINATED	4.83(.45)	4.13(.37)	3.87(.56)	3.54(.63)	5.2443
40.	LEADER DOES NOT GET THINGS ALL TANGLED UP	4.87(.35)	4.31(.31)	4.05(.56)	3.71(.65)	5.3886
41.	LEADER SCHEDULES WORK TO BE DONE	4.76(.52)	3.96(.40)	3.77(.49)	3.55(.53)	4.0054
42.	LEADER TAKES FULL CHARGE WHEN EMERGENCIES ARISE	4.88(.38)	4.13(.75)	3.76(.96)	3.31(1.11)	3.9783
43.	LEADER IS WILLING TO MAKE CHANGES	4.47(.72)	3.98(.37)	3.79(.59)	3.61(.76)	2.8311
44.	LEADER DRIVES HARD WHEN THERE IS JOB TO BE DONE	4.85(.38)	4.33(.39)	4.04(.62)	3.68(.69)	5.3148
45.	LEADER CAN REDUCE A MADHOUSE TO SYSTEM AND ORDER	4.75(.50)	3.54(1.01)	3.31(1.01)	2.97(1.07)	2.5341
46.	LEADER PRESUADES OTHER THAT HIS IDEAS ARE TO THEIR ADVANTAGE	4.32(.52)	3.61(.54)	3.37(.54)	3.09(.60)	4.8845
47.	LEADER TRUSTS MEMBERS TO EXERCISE GOOD JUDGMENT	4.16(.78)	3.75(.53)	3.64(.55)	3.55(.60)	
48.	LEADER ANTICIPATES PROBLEMS AND PLANS FOR THEM	4.74(.48)	3.63(.64)	3.45(.63)	3.20(.62)	3.1706
49.	LEADER DOES NOT GET CONFUSED WHEN TOO MANY DEMANDS ARE MADE OF HIM	4.66(.73)	4.07(.55)	3.82(.74)	3.60(.92)	2.8505
50.	LEADER DOES NOT WORRY ABOUT THE OUTCOME OF A NEW PROCEDURES	3.73(1.18)	3.66(.82)	3.52(.79)	3.42(.80)	
51.	LEADER CAN INSPIRE ENTHUSIASM FOR A PROJECT	4.68(.51)	3.87(.43)	3.55(.63)	3.23(.69)	5.1043
52.	LEADER ASKS THAT STANDARD RULES AND REGULATIONS BE FOLLOWED	4.43(.72)	3.85(.47)	3.78(.56)	3.63(.62)	

		Normative	High	All	Low	t
53.	LEADER PERMITS GROUP TO SET ITS OWN PACE	2.94(1.09)	2.78(.58)	2.94(.61)	3.10(.62)	2.4651
54.	WHEN PRACTICAL TO DO SO LEADER EXPLAINS REASONS FOR HIS ORDERS, REQUESTS, OR INSTRUCTIONS	4.58(.69)	3.99(.42)	3.83(.59)	3.66(.72)	2.5641
55.	I would describe this leader as a person <u>most concerned</u> with:					
	Avoiding Failure (Playing it Safe)		Neither	Particularly	Looking for sound opportunities	
	1 2 3 4 5 6 7 8 9 10 11 12 13					
			9.95(1.28)	8.92(2.08)	7.68(2.20)	5.7759
56.	To get you to perform, this leader used:					
	Threats and Punishment Exclusively		Both Equally		Promises and Reward Exclusively	
	1 2 3 4 5 6 7 8 9 10 11 12 13					
			7.97(1.15)	7.52(1.48)	6.93(1.71)	3.2860
57.	To what extent did this leader give you <u>too much</u> direction (instruction, or explanations, or checking up on what you were doing)?					
	Always		About Half the Time		Never	
	1 2 3 4 5 6 7 8 9 10 11 12 13					
			8.76(1.54)	8.72(1.83)	8.69(2.04)	
58.	To what extent did he give you <u>too little</u> direction?					
	Always		About Half the time		Never	
	1 2 3 4 5 6 7 8 9 10 11 12 13					
			10.03(1.17)	9.23(1.67)	8.19(1.695)	5.8043
59.	To what extent did he consult with you and encourage your participation in decision making <u>when you would have liked for him to?</u>					
	Always		About Half the time		Never	
	1 2 3 4 5 6 7 8 9 10 11 12 13					
			7.01(1.65)	6.98(1.77)	6.84(1.91)	
60.	How often did he <u>over-consult</u> with you---tried to get your participation when you would have preferred that he didn't?					
	Always		About Half the time		Never	
	1 2 3 4 5 6 7 8 9 10 11 12 13					
			10.69(1.41)	10.36(1.59)	9.77(1.715)	2.7022

Note: items 4, 8, 18, 21, 22, 26, 30, 32, 35, 36, 38, 40, 49, 50, 55, 57, 58, and 60 had reverse scoring scales in the actual study (see Appendix B). They have been presented here so that a high score is always favorable.

<sup>a</sup>For 80 d.f. t must exceed the following to be significant at the level indicated:

3.416 for .001 level  
2.638 for .01 level  
2.375 for .02 level  
1.990 for .05 level

Table 3

Highest Scale Value, Highest Agreement Normative Leader Behaviors

MLBDQ Item	Mean (1=never) (5=always)	Standard Deviation
26. Leader does not misuse authority	4.93	.26
10. Keeps group working together	4.88	.33
42. Takes full charge when emergencies arise	4.88	.38
8. Takes necessary action	4.87	.34
40. Does not get things all tangled up	4.87	.35
30. Does not back down when he ought to stand firm in dealing with his troops	4.86	.49
3. Lets group members know what is ex- pected of them	4.85	.36
44. Drives hard when there is a job to be done	4.85	.38
34. Makes sure that his part in the group is understood by group members	4.83	.41
39. Sees to it that work of group is coordinated	4.83	.45
37. Looks out for personal welfare of group members	4.81	.41



Table 4

Selected Normative Leader Behaviors Reflecting Lower Scale  
Values And Lower Respondent Agreement

MLBDQ Item	Mean	Standard Deviation
47.-Leader trusts members to exercise good judgment	4.16	.78
19.-Treats all group members as his equals	4.14	1.21
35.-Not reluctant to allow group members freedom of action	4.06	.92
13.-Puts group suggestions into operation	3.91	.75
21.-Does not unilaterally decide how things should be done when he reasonably could consult with his men	3.48	1.27
14.-Leader needles members for greater effort	3.06	1.29
53.-Permits group to set its own pace	2.94	1.09

Note: 1 = never, 5 = always



Table 5

## Factor Loadings for Normative Leader Behavior Descriptions

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8	Factor 9
1	0.1694	-0.0324	-0.1187	0.5658	0.0775	0.0313	-0.0056	-0.0437	0.1068
2	0.2499	-0.0253	-0.0597	0.5000	0.0406	0.0537	-0.0303	0.1373	-0.0119
3	0.0520	-0.1375	-0.2644	0.5168	0.1514	-0.0622	-0.1283	-0.1316	-0.1253
4	-0.1062	0.0839	0.5511	-0.0848	0.1276	0.1599	-0.0974	0.0915	0.1056
5	0.4422	0.0642	-0.1384	0.1582	0.0503	0.0537	0.3188	-0.2731	-0.0664
6	0.0160	-0.1833	-0.2718	0.3881	0.2922	0.1152	0.0324	0.0662	0.1797
7	0.2483	-0.0407	0.0727	0.5366	0.0850	-0.2372	0.0358	0.0655	-0.1571
8	-0.1249	0.5961	0.0539	-0.1421	-0.1523	-0.0266	-0.1396	-0.2003	0.0331
9	0.3616	0.1161	-0.0872	0.2460	0.0883	0.3188	0.3259	-0.0036	0.0389
10	-0.0457	-0.1546	-0.0722	0.6302	0.0255	-0.0263	0.2694	-0.1777	-0.1465
11	0.5055	0.0453	-0.0291	0.2063	0.0336	0.0040	0.0077	0.1914	-0.0478
12	0.5211	-0.0956	-0.0115	0.1663	0.1512	0.1618	0.0082	0.0012	-0.1093
13	0.6503	0.0872	-0.0745	0.0814	0.1175	0.1142	-0.0660	-0.0007	-0.0566
14	0.0136	-0.0553	0.1033	0.2054	0.0652	-0.0029	-0.1175	0.3816	-0.1300
15	-0.0218	0.0609	-0.1078	0.1423	0.0094	-0.0265	0.0115	0.0262	-0.3677
16	0.0485	0.0825	-0.1488	0.5007	0.3703	-0.0715	0.0562	-0.0515	-0.0543
17	0.0823	-0.1376	-0.1361	0.2609	0.1455	0.1509	0.2940	-0.0406	-0.1142
18	0.1139	0.4661	0.0040	-0.2698	0.0291	-0.0793	-0.0234	0.0641	-0.2282
19	0.2399	-0.0576	0.0017	0.0088	-0.1182	0.1567	-0.0113	-0.1714	-0.2757
20	0.1843	-0.2144	0.0350	0.4641	0.2299	-0.0721	0.2905	0.0393	-0.0470
21	0.0444	0.0813	0.0329	-0.0297	-0.1556	-0.0590	0.0642	0.3953	-0.0168
22	0.0243	0.5004	-0.1129	-0.2555	0.0173	0.0477	0.1959	0.2305	-0.2905
23	0.2364	-0.1458	-0.0406	0.1944	0.4068	-0.0240	0.0407	0.0042	-0.0409
24	0.0012	-0.1571	-0.1280	0.5421	0.1176	-0.0427	0.1619	0.1228	-0.2190
25	0.1520	-0.0617	-0.2710	0.3738	0.3765	0.0626	0.1192	0.1378	0.0904
26	-0.0310	0.7052	0.1865	-0.0793	-0.1472	0.0015	-0.0939	0.1194	0.1099
27	0.1029	-0.2368	-0.2013	0.3771	0.4431	0.0897	0.3598	0.1362	0.0982
28	0.1360	-0.0201	-0.0255	0.0730	0.0973	0.0040	0.0115	0.0718	-0.3491
29	0.0522	-0.2442	0.0741	0.3240	0.1913	-0.1558	0.1053	0.2315	-0.3369
30	-0.1268	0.6685	0.0897	-0.0697	-0.1553	0.0392	-0.1339	0.0635	0.1673
31	0.0220	-0.0721	0.0670	0.0370	0.4750	0.0268	0.0735	-0.1456	-0.0633
32	-0.0432	0.0967	0.5884	-0.1091	-0.1571	0.0656	-0.1174	0.0561	0.0719
33	0.1863	-0.1168	-0.0261	0.2692	0.3373	-0.1103	-0.0736	0.0257	-0.2183
34	0.1043	-0.2974	-0.1859	0.3799	0.3977	-0.0580	0.0208	0.0337	-0.1406
35	-0.3059	0.1383	-0.0044	0.0549	-0.0387	-0.3455	0.0574	0.0655	0.4137
36	-0.0347	0.2436	-0.0588	-0.3010	-0.0354	0.1485	-0.1707	-0.0190	0.2995
37	0.1285	-0.0474	-0.1664	0.3229	0.2726	0.0299	0.0173	-0.1953	-0.1508
38	-0.0135	-0.0081	0.0505	-0.0601	-0.0463	0.4032	0.0275	-0.0588	0.0387
39	-0.1130	-0.2266	-0.0536	0.6726	-0.0422	-0.0950	0.2157	-0.0935	-0.2674
40	0.700	0.3153	0.1456	-0.0155	-0.2825	-0.1201	-0.3545	-0.0376	0.0100
41	0.2208	-0.1065	0.1525	0.4141	0.1549	-0.0602	0.4382	-0.1321	-0.0870
42	0.1156	-0.0693	0.0143	0.3555	0.0831	-0.0495	0.1505	0.0713	-0.0349
43	0.3822	0.0459	0.1276	0.1929	0.2260	-0.1253	0.1930	-0.2227	-0.0294
44	0.0677	-0.4363	0.0151	0.3388	0.2851	-0.1093	0.3023	0.1857	-0.1493
45	-0.0660	-0.0888	0.0284	0.4698	0.4060	-0.0149	0.4260	0.0684	-0.1186
46	0.0558	-0.0853	0.1143	0.4187	0.2614	0.0911	-0.0575	0.1357	0.0246
47	0.5912	-0.1053	-0.0012	0.0338	-0.0302	0.0262	0.1345	-0.0187	-0.1018
48	0.0358	-0.1070	0.1679	0.3845	0.4488	-0.1530	0.2132	-0.1873	-0.0332
49	-0.1173	0.1768	0.2484	-0.0668	-0.0281	0.0490	-0.4743	-0.0013	-0.0417
50	-0.3250	0.1251	0.0718	0.0691	-0.0693	0.1455	-0.0604	-0.0943	-0.0323
51	0.1934	-0.1446	-0.1673	0.3152	0.5250	-0.1595	0.3529	0.0865	0.0045
52	0.2472	-0.1343	-0.0838	0.4127	0.1343	-0.4270	0.0925	0.0277	-0.1765
53	0.2157	-0.0061	0.0990	-0.0178	0.0343	0.5587	-0.0116	0.0488	-0.0948
54	0.3312	-0.1664	-0.2241	0.2352	0.3233	-0.1079	-0.0620	-0.1830	-0.0592

## Column Sum of Squared Loadings For Each Rotated Factor

2.84      2.98      1.46      5.55      2.76      1.34      1.96      1.06      1.41

All Rotated Loadings Squared = 26.37

Percent of Total Score Variance Accounted For = 39.57

Percent of All Common Variance Accounted For = 72.98

Table 6A

Factor Loadings for Normative Leader Behavior Descriptions By High Stressed  
Respondents ( N = 57 )

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8	Factor 9	Factor 10
1	-0.0390	0.2610	-0.1443	-0.0325	-0.2374	<u>0.5559</u>	0.1057	0.1452	-0.0069	-0.1751
2	0.1211	0.1772	0.0787	0.0847	0.1665	0.1692	0.3032	0.4553	0.1179	-0.0287
3	0.3429	<u>0.5469</u>	-0.1964	0.2186	0.0399	0.3153	0.1658	-0.0060	0.0038	0.0290
4	-0.0605	0.0731	0.0412	<u>-0.8335</u>	-0.0017	-0.0527	-0.0092	0.0779	0.0420	-0.0083
5	0.0093	-0.0286	0.1752	0.1224	-0.0547	-0.1496	-0.0840	-0.0647	-0.0605	-0.1669
6	<u>0.7075</u>	0.1031	0.0525	0.3542	0.0588	0.0878	-0.0082	-0.1618	0.0135	0.0501
7	0.1657	-0.2200	0.0946	0.0879	-0.0362	0.2484	0.4726	0.2103	0.0049	0.0329
8	<u>-0.5824</u>	-0.0419	-0.0351	-0.2966	-0.2342	-0.0289	-0.2883	0.1754	0.1316	0.0741
9	0.1080	0.1229	-0.0681	<u>0.6734</u>	-0.0250	0.0059	-0.0415	0.2616	0.0943	-0.0012
10	0.3027	0.0089	-0.0775	-0.0090	0.1498	<u>0.8034</u>	0.1300	0.0088	-0.0205	-0.0926
11	-0.0402	0.4423	0.5147	0.0136	0.0647	-0.0259	-0.0030	-0.1456	0.1022	-0.1327
12	0.0266	0.5049	0.4622	0.1218	-0.0015	-0.0909	-0.0645	0.1079	0.0209	-0.0510
13	-0.0125	-0.0612	<u>0.7452</u>	-0.1030	0.0386	0.0102	0.0228	0.1235	0.1124	-0.1547
14	0.2484	0.0179	0.0021	-0.0082	-0.1667	-0.0384	0.1104	<u>0.6184</u>	0.0130	-0.0885
15	0.1476	-0.0278	0.1047	0.1914	-0.2229	0.0732	0.1496	0.1650	-0.4747	-0.0913
16	0.2300	0.2970	-0.3219	0.0837	0.1071	<u>0.5243</u>	0.0346	0.1239	-0.2831	0.1076
17	0.1415	0.2518	0.1048	-0.0848	<u>0.6815</u>	-0.0355	-0.0126	0.0056	0.0127	0.0963
18	-0.1204	0.0872	0.0499	0.0335	<u>-0.6287</u>	-0.0094	-0.0120	0.1130	-0.1460	0.0427
19	0.1035	-0.0960	0.2408	0.0592	-0.1509	-0.0281	0.1799	-0.0845	-0.0557	0.1005
20	0.4800	0.2440	0.1291	-0.0081	0.1641	0.2326	0.0206	0.0720	-0.0253	-0.5523
21	0.1538	-0.3731	0.1674	-0.2187	-0.0584	-0.0220	-0.0422	0.1103	0.2558	-0.0835
22	-0.0298	0.0248	-0.0265	-0.0267	-0.0918	<u>-0.5723</u>	-0.0736	0.1935	-0.0849	0.0950
23	<u>0.7429</u>	0.0658	0.0827	-0.0736	0.0876	-0.0325	0.0125	0.2370	-0.0577	-0.2465
24	0.4410	-0.0068	-0.0979	0.0182	0.1451	0.1974	0.5544	0.2337	-0.1714	-0.1061
25	0.4197	0.4440	0.0127	-0.0173	0.1221	0.1286	-0.1086	0.3897	-0.3415	-0.0224
26	-0.3994	0.0019	0.1780	-0.0175	-0.3949	-0.1248	-0.3746	0.2354	0.1192	0.2818
27	<u>0.7813</u>	0.0872	0.0715	0.0409	0.2702	0.0423	0.0623	0.0356	0.0348	0.0257
28	0.0535	0.1951	0.0402	0.0025	0.0663	-0.0167	-0.0074	0.0081	0.0274	-0.0588
29	<u>0.7264</u>	0.0937	0.0480	0.0700	0.0263	-0.0098	0.0692	0.0348	-0.2827	-0.2556
30	-0.0660	-0.0447	-0.1181	0.0084	0.1156	-0.0521	-0.0320	-0.0667	0.0071	<u>0.7524</u>
31	0.0713	-0.0595	0.1771	-0.0918	0.1963	-0.1033	-0.1201	-0.0036	0.1835	0.0119
32	-0.0733	0.0211	0.1686	0.0691	-0.0396	-0.0805	-0.0904	0.1142	<u>0.5962</u>	0.0910
33	0.3302	-0.0343	0.0032	0.1720	0.1936	0.1596	0.1668	0.0961	-0.0576	0.0499
34	<u>0.6564</u>	0.1033	-0.1672	0.3255	0.0030	0.2992	0.0395	0.0329	-0.0475	-0.0446
35	0.0837	-0.2786	-0.1294	-0.3285	-0.1939	0.0374	0.0683	-0.0323	0.0624	0.0028
36	-0.0403	-0.3533	0.4482	0.0273	0.0693	-0.0627	-0.0124	-0.1762	-0.0584	0.1409
37	0.3054	0.1511	0.2530	-0.0255	-0.2355	-0.1154	-0.0993	0.0571	0.1418	0.1798
38	-0.0633	-0.0424	0.0614	0.0122	0.1996	0.3257	-0.0073	-0.1484	0.2235	-0.0360
39	<u>0.7007</u>	0.0634	-0.1429	-0.0768	0.0606	0.4073	0.2369	0.0932	-0.0834	0.0147
40	-0.1752	-0.0300	0.0041	0.0263	0.0819	0.0521	0.1048	0.0334	<u>0.5454</u>	-0.1657
41	<u>0.7409</u>	0.0577	0.0100	-0.0734	-0.1034	-0.0031	0.2335	0.1743	0.0498	0.0647
42	0.4429	-0.0031	0.3072	-0.0708	-0.2349	0.3178	-0.2458	0.0954	0.1158	-0.1721
43	0.2257	<u>0.5085</u>	0.0509	-0.0469	0.1599	0.0781	-0.1360	0.1302	-0.0727	-0.1289
44	<u>0.6576</u>	0.0459	-0.0348	0.1902	-0.0039	0.0159	0.2756	0.0721	-0.0550	-0.1137
45	<u>0.7211</u>	0.1111	-0.0954	-0.1027	-0.0935	0.2589	-0.0010	0.0075	-0.2443	0.1100
46	0.1794	-0.0008	0.1847	0.1619	-0.0356	<u>0.7396</u>	-0.0016	0.0849	-0.1820	0.0878
47	0.2481	0.0638	0.3275	0.4624	-0.0674	0.1007	0.2056	-0.2238	-0.0404	-0.0189
48	<u>0.5926</u>	0.0554	-0.1174	0.3862	-0.1484	0.0794	-0.1077	0.0333	0.1417	0.0252
49	-0.1902	<u>-0.7628</u>	-0.1715	-0.0072	0.1125	-0.0086	-0.1742	0.0081	0.0587	-0.0309
50	-0.1304	-0.1263	0.0186	0.1971	0.4468	0.2157	-0.0541	0.1442	-0.0954	0.1247
51	0.5159	0.5365	-0.1205	0.1104	0.1156	0.0873	0.0588	0.0325	-0.2634	0.0353
52	0.1234	0.3071	-0.0051	-0.0771	-0.1102	-0.0116	<u>0.5434</u>	0.0535	-0.0379	-0.0075
53	-0.0115	0.2642	0.0434	0.0178	-0.0165	-0.1279	-0.0321	0.0925	0.0972	0.0464
54	0.0166	<u>0.9118</u>	-0.0534	-0.0185	-0.0115	0.0414	0.0591	-0.0351	0.0773	-0.0175

Column Sum of Squared Loadings For Each Rotated Factor

7.65      4.16      2.16      2.35      2.10      3.17      1.76      1.54      1.73      1.48

Table 6B

	Factor 11	Factor 12	Factor 13	Factor 14
1	-0.0051	0.0075	0.0611	-0.1203
2	-0.0922	0.0641	0.0014	0.0286
3	0.1824	-0.1060	-0.0228	-0.3126
4	0.0189	0.0340	-0.0349	0.0811
5	0.0987	-0.3263	0.0009	-0.0596
6	0.2467	-0.1756	-0.0652	-0.1318
7	0.1410	0.1094	-0.0624	-0.1433
8	-0.0440	-0.0344	0.2538	0.2765
9	0.2614	-0.0553	0.0799	0.1198
10	0.0288	-0.0835	0.1161	-0.0980
11	0.0873	-0.0007	0.3089	-0.0409
12	0.2522	-0.0740	-0.1268	0.1283
13	0.2021	-0.0025	0.0069	-0.0369
14	0.0701	0.0203	0.0549	-0.0386
15	0.1833	-0.1738	-0.0057	0.1652
16	-0.1441	-0.0473	0.2249	-0.0896
17	-0.1882	-0.0012	0.0617	-0.0378
18	-0.0495	-0.1921	-0.1412	0.0123
19	<u>0.5291</u>	-0.0422	-0.1432	0.0516
20	-0.0719	-0.0853	0.1309	0.0136
21	-0.3184	-0.0467	0.0376	-0.3391
22	0.1367	-0.0315	0.2314	-0.2491
23	0.1070	-0.0157	0.0121	0.1010
24	0.0127	0.0579	0.0141	-0.0530
25	0.0606	-0.0075	0.2571	0.0711
26	-0.1384	-0.0107	-0.0484	-0.0256
27	-0.0484	0.0783	0.1658	-0.0250
28	0.2070	<u>0.6501</u>	0.1203	-0.0271
29	0.0212	-0.0565	-0.0382	-0.0825
30	0.0942	-0.0081	0.0628	0.0218
31	0.2588	0.2879	0.4010	-0.0598
32	-0.0294	0.1251	-0.0868	0.0451
33	0.0330	0.1310	<u>0.6013</u>	0.0252
34	-0.1403	0.0904	0.3727	0.0233
35	<u>-0.5612</u>	-0.0899	-0.0287	-0.0208
36	-0.1931	-0.0450	0.0094	0.1160
37	0.1188	-0.1521	-0.1056	0.3803
38	0.1537	0.1723	-0.2149	0.1522
39	0.1197	-0.0082	0.2064	-0.0781
40	0.1893	-0.2252	0.2196	0.0504
41	0.0222	-0.0594	-0.0186	0.1979
42	-0.1845	-0.0403	-0.0779	-0.0038
43	0.0862	0.1347	0.0104	0.0267
44	-0.2561	0.3483	-0.0497	-0.0549
45	-0.0880	0.1671	0.1577	-0.0710
46	-0.1379	0.1241	0.2061	0.0267
47	0.1815	0.0046	-0.1213	0.3272
48	-0.1417	0.0649	0.2015	0.4076
49	0.0672	-0.1839	0.0366	-0.0876
50	0.1944	-0.1470	-0.0756	-0.0052
51	-0.2219	0.2159	0.0752	0.0030
52	-0.0477	-0.0555	0.1048	0.0758
53	<u>0.6350</u>	0.1309	-0.0379	-0.0403
54	0.1197	-0.0094	-0.0342	-0.0078

Column Sum of Squared Loadings For Each Rotated Factor

2.13

1.25

1.47

1.06

All Rotated Loadings Squared = 34.03

Percent of Total Score Variance Accounted For = 63.01

Percent of All Common Variance Accounted For = 89.85



Factor Loadings for Normative Leader Behavior Descriptions By Low Stressed  
Respondents ( N = 100)

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8	Factor 9	Factor 10
1	0.0843	-0.0782	0.0459	-0.1001	-0.1787	0.1121	0.0211	<u>0.7117</u>	0.0610	0.1698
2	0.3089	-0.0897	0.1509	0.0059	0.2433	0.1997	0.0913	0.2635	-0.4522	0.0697
3	0.1836	0.2349	-0.1443	-0.0627	0.1241	0.2745	0.0969	<u>0.5483</u>	0.0054	0.1510
4	-0.0031	-0.0253	0.0394	0.0427	-0.0205	0.0339	-0.0272	-0.0121	0.1273	-0.0866
5	-0.0104	0.2278	-0.0406	-0.0250	0.1626	0.0312	0.3036	-0.1242	-0.1078	0.0704
6	0.0354	-0.0617	0.0587	-0.2346	0.0575	<u>0.5288</u>	-0.0257	0.1259	-0.0384	0.0722
7	0.3541	0.1061	0.1463	-0.1512	0.1282	0.1722	0.0443	0.2889	-0.3453	0.1443
8	0.0155	-0.0678	-0.0882	<u>0.8235</u>	-0.0615	-0.0761	0.0243	-0.0986	0.0666	-0.0812
9	0.1066	0.0454	-0.0052	-0.0241	-0.0735	0.0319	-0.0079	0.1443	-0.1599	-0.0416
10	0.2837	-0.0599	-0.3089	-0.3094	0.4688	0.4692	0.0969	0.1413	0.0033	0.0181
11	<u>0.6450</u>	-0.0107	0.1066	-0.0306	0.1028	0.0425	0.1080	0.0924	0.0549	0.0903
12	0.1719	0.0913	0.0361	-0.1114	-0.0310	0.2789	<u>0.5613</u>	0.1029	0.1424	-0.2884
13	0.4469	0.0755	0.3568	0.0166	-0.0954	0.0082	0.3597	-0.0545	-0.1734	0.0646
14	0.0353	0.0398	0.1186	-0.0581	0.3909	-0.0971	0.3427	0.1298	0.0810	0.1815
15	0.0641	0.0060	0.0264	0.0234	<u>0.7367</u>	0.0213	-0.0197	-0.0876	-0.0379	-0.0461
16	0.2201	0.0938	0.3972	-0.0671	0.4861	0.2232	-0.1332	0.0581	-0.0974	0.0125
17	0.0201	-0.0855	0.1463	0.0434	0.1400	0.2273	0.1122	0.1062	0.2986	-0.0668
18	0.0139	-0.1836	-0.1850	0.1028	0.2335	-0.2395	0.1269	-0.0852	0.1032	-0.0941
19	0.0044	0.0202	-0.0844	0.0416	-0.0049	-0.0015	<u>0.7026</u>	0.0862	-0.0346	0.0389
20	0.2008	0.1566	0.0708	-0.0855	0.1529	0.1421	0.0631	0.0825	-0.0864	0.0402
21	-0.2735	-0.0044	0.1061	0.1274	0.1221	-0.2535	0.1591	<u>0.5556</u>	-0.1572	-0.1937
22	-0.3373	0.1143	0.2980	<u>0.6545</u>	-0.0226	-0.0200	-0.0912	-0.0629	-0.1436	-0.0409
23	-0.1230	-0.0494	0.3285	-0.1947	-0.1209	0.2731	0.3159	0.0576	-0.0541	<u>0.5571</u>
24	0.2402	-0.1337	0.0934	-0.0392	0.0767	0.4490	0.1746	0.1454	-0.0751	0.2074
25	0.1736	0.0124	<u>0.7046</u>	-0.0482	0.0790	0.1351	-0.0455	0.0537	0.0240	0.0338
26	0.1032	-0.3473	-0.1394	<u>0.6575</u>	0.0923	-0.1326	0.0126	0.1287	0.1989	-0.1263
27	0.0279	0.4723	0.3075	-0.0604	0.1118	0.3667	0.0552	-0.1098	-0.0193	0.0634
28	0.1126	-0.0233	-0.0646	0.0391	0.0270	0.0936	0.0003	0.0166	0.0078	-0.0211
29	0.1621	0.0802	-0.0205	-0.1073	-0.0468	0.1041	0.1943	-0.0084	-0.1148	0.1025
30	-0.0982	<u>-0.6275</u>	0.0088	0.3169	-0.2307	0.1357	-0.1229	-0.0590	0.0623	-0.2283
31	-0.0945	<u>0.5798</u>	0.1429	-0.1275	-0.1197	0.2523	0.0036	-0.1614	0.1012	0.0476
32	0.0751	-0.2498	-0.1674	0.1810	0.2095	0.0222	-0.0351	-0.0044	0.0614	0.0224
33	0.1255	0.1357	0.0557	-0.1137	-0.0413	0.0973	0.0441	-0.0557	0.1502	0.0389
34	0.0963	0.3043	0.0166	0.0503	-0.0778	0.4341	0.0251	0.3033	0.0041	0.0543
35	-0.0000	0.1205	-0.0259	0.0678	-0.1066	0.0436	-0.1396	0.0994	0.1426	-0.1730
36	-0.1032	-0.1922	-0.0433	0.0939	0.0321	-0.0170	0.0574	-0.1084	0.0180	-0.7016
37	0.2567	<u>0.6720</u>	-0.0974	0.0143	0.0261	0.1411	0.0478	0.1168	-0.1077	0.1140
38	-0.0216	<u>0.7213</u>	0.0450	0.0021	-0.1207	-0.1322	-0.1192	0.0852	-0.0621	0.0285
39	0.1243	0.2393	-0.2428	-0.0961	0.1517	0.3745	-0.0200	0.0615	0.0794	<u>0.5305</u>
40	0.0649	-0.2272	-0.3025	0.4514	0.0169	-0.3767	0.1193	0.0756	-0.1024	-0.0543
41	0.1723	0.1945	0.1238	-0.2203	-0.1479	0.3197	-0.0835	0.2718	-0.0075	0.4150
42	0.0907	0.1791	0.0558	0.0955	0.1061	0.1692	-0.0316	0.1719	0.0261	0.1191
43	0.2504	0.0897	0.0273	-0.1222	-0.1225	0.2771	0.2955	-0.1145	0.0355	-0.0765
44	0.0223	0.3900	-0.1107	-0.1908	0.2780	0.2429	-0.0157	0.1189	0.0597	0.3346
45	-0.0036	0.2265	0.1725	-0.0525	0.1416	<u>0.6597</u>	-0.1856	-0.0374	0.0319	-0.0298
46	<u>0.6430</u>	0.1570	0.1240	0.0209	0.1626	0.3094	-0.0573	-0.0595	0.0231	-0.0441
47	0.0822	-0.2966	-0.0254	0.0539	0.0887	0.1137	0.2691	-0.0079	-0.2443	0.2541
48	0.1533	0.1458	0.0292	-0.0634	0.0146	<u>0.7784</u>	0.1192	-0.0720	-0.1011	0.1592
49	0.0516	-0.0651	-0.1030	0.2426	0.0494	-0.3195	0.0155	0.2652	0.3072	-0.0366
50	0.0338	-0.0156	0.0242	0.0499	-0.0033	-0.0645	0.0152	0.0279	<u>0.6424</u>	0.0258
51	0.1426	0.2055	0.1196	0.0835	-0.0295	<u>0.7596</u>	0.1699	0.1093	-0.1559	0.0284
52	0.4481	0.2060	0.0269	-0.1846	0.2159	0.2708	0.0220	0.1389	-0.2635	0.1912
53	0.1601	-0.0580	0.1208	0.0139	-0.0178	0.0684	0.1885	-0.1042	0.1061	0.0196
54	0.1345	0.1134	0.1686	-0.2345	0.1707	0.1077	0.1660	0.0497	-0.1841	0.0860

Column Sum of Squared Loadings For Each Rotated Factor

2.40	2.81	1.75	2.52	1.92	4.26	1.84	1.92	1.49	2.00
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Table 7B

	Factor 11	Factor 12	Factor 13	Factor 14	Factor 15	Factor 16	Factor 17
1	-0.0462	0.0790	0.0137	-0.0046	0.0200	0.0444	-0.0023
2	-0.1010	0.2880	0.1321	0.1369	0.0101	0.0410	-0.0094
3	0.1626	0.0536	-0.1193	0.0018	0.1515	0.0487	0.0136
4	-0.0120	0.0326	0.0529	<u>0.7580</u>	0.0641	0.0532	-0.0125
5	-0.2667	-0.1750	-0.1851	-0.3334	-0.1309	0.4683	-0.0030
6	-0.1561	0.1097	-0.1186	-0.0475	0.1012	0.0511	-0.0742
7	-0.0104	-0.0375	-0.2156	-0.0002	0.2837	-0.0968	0.0832
8	0.0429	-0.0802	-0.0525	-0.0287	-0.0168	-0.0743	-0.1153
9	-0.0371	0.0446	0.2067	-0.0093	0.0042	<u>0.8250</u>	0.1167
10	-0.0214	0.1316	0.0448	-0.0157	0.2519	-0.0110	0.1194
11	-0.1317	0.1943	0.1118	0.1101	0.1307	0.2258	0.0242
12	-0.0697	0.2562	0.1031	-0.1089	-0.1037	0.0643	0.0450
13	-0.1078	0.1477	0.1986	0.1639	-0.0780	0.0919	0.1110
14	0.0647	0.1084	-0.3263	0.2345	0.2456	0.1035	-0.0406
15	0.0336	0.0165	-0.0941	-0.0858	-0.0210	-0.0526	0.0193
16	-0.1297	0.1604	-0.0203	-0.0685	0.0736	0.0479	-0.0069
17	0.0104	0.1609	0.1530	<u>-0.6062</u>	0.1065	0.1651	0.2040
18	0.0931	-0.3930	0.1778	0.2590	0.0977	0.1436	-0.2468
19	-0.0514	-0.0272	-0.0103	-0.0520	0.1158	-0.0054	0.0482
20	0.1027	<u>0.6872</u>	-0.0532	-0.0245	0.1935	0.0571	0.1328
21	0.0702	-0.0215	0.0519	0.0208	0.0816	0.0580	0.0263
22	-0.1003	-0.0418	0.1110	0.0430	-0.0233	0.1172	-0.1534
23	0.0735	-0.1023	0.1757	0.1554	0.0074	0.0221	0.1108
24	-0.1438	0.0646	0.0186	-0.1220	0.2245	-0.0124	0.2593
25	0.0220	0.0497	0.1206	-0.0765	0.0514	-0.0331	0.0683
26	0.1468	0.0292	0.0339	0.1178	0.0103	-0.0089	0.0776
27	-0.1280	-0.0526	0.0531	-0.4263	0.1514	0.0596	0.0606
28	<u>-0.6276</u>	0.0087	-0.0570	0.1143	0.0354	0.1388	0.1531
29	-0.2050	0.0509	-0.0298	0.0221	<u>0.7860</u>	-0.0780	0.1019
30	0.0961	-0.1151	-0.0753	0.3014	-0.0873	0.1230	0.0288
31	0.1746	0.0202	-0.0333	0.0887	0.0656	0.1827	-0.0495
32	<u>0.6243</u>	-0.0160	-0.1114	0.1728	-0.1295	0.0828	0.2977
33	0.0654	0.1656	0.0503	-0.0717	0.3595	0.1740	<u>0.7046</u>
34	-0.1861	0.2469	-0.0345	0.0175	0.0637	0.0871	0.4200
35	0.4850	0.0303	-0.2552	0.0804	0.0653	0.0325	0.0120
36	0.1024	-0.2401	0.0687	0.1193	-0.1210	0.0116	-0.0336
37	-0.0156	0.0978	-0.0964	0.0393	0.2261	0.0413	0.2197
38	-0.0041	-0.0304	<u>0.7268</u>	-0.0382	-0.0054	0.1068	0.0687
39	-0.0281	-0.1713	-0.0048	-0.1333	0.2366	-0.0588	0.0311
40	0.0794	-0.0296	0.0001	0.3696	-0.1804	-0.2115	0.2183
41	0.1245	-0.0007	-0.1563	-0.1723	0.3403	0.0869	0.0595
42	0.1160	0.1183	0.0165	-0.0156	<u>0.6031</u>	0.0463	0.1312
43	-0.3235	0.3072	-0.0022	-0.1321	<u>0.2263</u>	0.0006	-0.0785
44	-0.1877	0.3985	0.0639	0.0214	0.1699	-0.0557	0.3270
45	-0.1226	0.0343	0.0300	0.0142	0.4167	0.1284	0.0626
46	0.0451	0.0353	0.0479	-0.2192	0.1820	-0.0662	0.1143
47	-0.1060	0.3770	0.1883	0.0396	-0.0360	-0.0106	-0.1410
48	0.1420	0.0400	-0.0147	0.0834	-0.0815	-0.1286	0.1949
49	0.0219	-0.1657	-0.1183	<u>0.4987</u>	-0.0852	-0.3167	0.1651
50	0.0525	-0.0477	0.0226	0.0980	-0.0349	-0.1365	0.0241
51	0.0298	0.1533	-0.0206	-0.2343	0.0831	0.0905	0.0075
52	-0.0271	-0.0074	0.0064	0.0312	0.3289	-0.1223	0.2025
53	-0.0984	0.0266	<u>0.6135</u>	0.0372	0.0060	0.0490	-0.0689
54	-0.1339	-0.0060	-0.0202	-0.0854	0.0611	-0.0154	0.3566

Column Sum of Squared Loadings For Each Rotated Factor

1.70	1.67	1.57	2.26	2.30	1.46	1.60
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All Rotated Loadings Squared = 35.47

Percent of Total Score Variance Accounted For = 65.69

Percent of All Common Variance Accounted For = 78.45





Tabl 8A

Selected Differential Conceptualizations of Normative  
Leader Behavior by High and Low Stress Respondents

Associated Items in  
Same Factor For High  
Stress Respondents

Items Common to Both  
Respondent Groups

Associated Items in  
Same Factor for Low  
Stress Respondents

48-Anticipates problems  
and plans for them.

45-Can reduce a mad-  
house to order.

6-Makes accurate  
decisions.

27-Handles complex pro-  
blems efficiently.

51-Can inspire enthu-  
siasm for a project.

27-Gives advance notice  
of changes.

41-Schedules work to be  
done.

29-Assigns group members  
to particular tasks.

39-Sees that work of group  
is coordinated.

34-Makes sure that his part  
in the group is under-  
stood by group members.

44-Drives hard when there  
is a job to be done.

8-Takes necessary action.

4-Not hesitant about  
taking initiative  
in group.

17-Makes his attitudes  
clear to group.

9-Does little things to  
make it pleasant to be  
a member of the group.

49-Doesn't get confused  
with many demands.

46-Persuades others that  
his ideas are to their  
advantage.

10-Keeps group working together.

11-Tries out his ideas in the group.

22-Is leader in fact, not just name only.

1-Acts as spokesman of the group.

16-Is a very persuasive talker.

32-Leader can wait, but does not blow up.

40-Does not get things all tangled up.

28-Can tolerate postponement and uncertainty.

30-Doesn't back down when he ought to stand firm in dealing with his troops.

37--Looks out for personal welfare of group members.

31-Gets superiors to act for welfare of group members.

53-Permits group to set its own pace.

35-Not reluctant to allow members freedom of action.

38-Doesn't permit members to take it easy in work.

19-Treats all group members as his equals.

22-Is leader in fact, not just in name only.

Table 9a

Intercorrelations Among Leader Behavior Description Items  
(Including Consolidated Performance Score)  
N = 104 (Decimals Omitted)

	CP										MLBDQ																								
	IS	Con	Dec	GE	Sup	DM	WF	LMR	CPS	#1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
IS*	--	70	69	70	60	53	85	64	63	28	42	67	31	29	61	70	59	37	61	60	58	45	21	60	75	74	44	55	29	-12	61	63	71	28	
Con			50	58	89	72	83	91	38	27	30	34	23	61	62	39	58	56	63	36	64	72	05	29	62	52	25	78	49	13	43	60	52	36	
Dec				64	57	51	72	54	74	36	48	57	71	37	48	39	63	17	62	38	47	23	09	36	62	57	71	33	15	10	77	29	59	43	
G.E.					50	39	72	46	68	41	71	48	31	21	58	45	57	30	63	51	61	48	45	53	78	57	50	32	36	-26	59	54	86	49	
Sup.						75	77	93	47	24	34	40	28	58	53	31	53	50	61	31	65	58	-06	17	56	41	35	76	41	28	52	45	43	35	
C.P.D.M.							69	74	35	27	36	38	28	49	40	28	38	43	62	52	63	54	-17	16	41	38	36	52	32	36	46	26	31	35	
W.F.								77	64	21	42	53	32	36	66	46	74	42	71	48	63	57	16	44	72	71	49	59	32	00	59	57	66	37	
LMR									42	18	26	40	27	61	58	33	55	63	66	36	64	57	-12	29	53	52	31	72	33	19	45	55	45	31	
CPS										25	51	54	48	22	52	39	53	23	52	34	39	18	19	54	65	54	50	23	12	-05	62	33	63	34	
MLBDQ																																			
Item #1										48	31	48	44	30	38	17	13		38	11	25	30	01	23	38	07	17	06	40	12	38	11	29	60	
2											46	25	13	33	38	23	41		55	45	52	33	00	33	52	19	47	03	24	-09	60	27	50	46	
3												30	27	44	61	29	30		51	45	39	17	-06	33	51	39	41	27	02	-04	58	25	48	20	
4													45	26	18	39	-08		35	12	18	07	05	23	31	31	37	04	20	16	40	04	30	49	
5														37	24	32	28		45	03	34	36	-16	08	25	10	12	44	26	30	31	14	20	35	
6															44	56	31		55	31	34	37	15	28	62	54	26	33	35	-09	37	38	63	30	
7																		27	33	37	32	29	24	06	49	46	36	19	35	15	-04	52	40	41	18
8																			19	53	12	33	43	28	30	61	57	49	40	26	00	38	51	54	32
9																				47	27	44	49	-23	21	36	13	20	37	27	-07	25	50	17	23
10																				41	67	41	-09	29	57	41	48	28	25	-04	57	35	57	44	
11																					56	38	05	35	36	39	30	17	15	-18	37	22	49	17	
12																							55	-04	22	54	28	42	42	29	-03	48	40	56	33
13																								14	21	45	20	26	52	55	-04	21	60	44	50
14																									16	17	29	-01	00	00	-31	-02	21	33	08
15																									49	45	22	14	21	-18	35	43	47	25	
16																										68	50	43	41	-02	54	55	69	42	
17																											31	39	22	-06	37	39	53	15	
18																													14	13	-01	54	24	52	42
19																														35	27	35	56	28	14
20																															07	06	40	37	60
21																																22	-20	-30	-02
22																																	28	48	31
23																																		44	30
24																																			42
25																																			

\*IS = Initiating Structure

Con = Consideration

Dec = Decisiveness

G.E. = Goal Emphasis

Sup. = Support

C.P.D.M. = Consultative Participative Decision-Making

W.F. = Work Facilitation

LMR = Leader Member Relations (N=71)

(Scores for the above Behavior Areas are means  
of subsets of MLBDQ items)

CPS = Consolidated Leader Performance Score (N=71)

Table 9b

	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
IS	48	52	55	78	36	35	43	60	99	19	56	55	31	81	71	66	35	40	76	23	62	44	45	37	09	67	69	-16	55	40	35	04	55	32	04
CON	66	48	61	63	21	33	55	42	68	40	33	72	-04	67	64	53	37	70	65	30	55	65	53	23	-01	66	51	23	79	31	60	39	30	45	15
Dec.	57	33	31	60	64	36	47	35	53	35	74	42	31	57	68	52	52	37	57	34	55	29	46	55	17	58	30	-21	36	41	38	08	56	30	18
G.E.	30	53	46	52	21	39	19	63	69	10	48	48	30	63	54	54	55	42	79	40	64	36	46	24	17	83	52	-12	55	60	43	-01	56	17	08
Sep.	79	45	49	59	29	43	68	33	59	58	40	75	01	62	68	44	37	58	54	39	54	66	51	27	02	60	34	10	63	28	74	40	29	48	22
CPDm	60	34	33	43	34	36	48	33	38	52	30	59	11	55	59	42	15	33	30	19	53	55	50	36	17	55	21	13	48	27	38	34	37	74	43
W.F.	63	50	63	71	37	42	53	55	76	36	53	69	18	79	75	63	39	60	73	27	69	59	50	39	12	72	51	00	71	49	53	43	61	39	23
LMR	86	38	59	61	33	34	72	45	61	58	40	80	05	65	65	43	32	62	56	25	56	74	49	35	20	60	36	17	65	34	55	41	25	48	17
CPS	41	35	37	44	38	38	31	41	54	19	64	36	31	57	63	45	47	40	61	74	61	28	34	41	20	60	31	-25	32	66	41	12	64	03	34
#1	16	23	10	24	07	05	09	14	22	-05	17	13	14	18	20	10	51	09	29	38	25	-18	55	05	-09	38	16	-06	26	35	21	-21	19	24	17
2	16	33	15	19	10	35	11	45	29	19	32	24	22	33	33	24	43	11	38	29	52	12	34	25	-03	62	19	-22	24	54	23	-11	51	26	07
3	29	21	11	52	38	28	38	37	34	21	44	21	44	48	52	26	30	06	40	16	39	20	-29	44	21	39	17	-44	15	36	18	-14	51	32	-01
4	35	17	08	37	40	16	28	07	19	11	42	08	19	21	38	23	52	20	22	35	27	-03	53	34	-02	26	04	-02	16	23	25	-11	28	16	16
5	49	08	11	38	16	02	41	-02	28	28	14	27	-06	21	27	27	37	31	24	20	15	20	48	14	03	35	10	09	34	10	30	13	16	32	26
6	32	48	48	47	19	38	24	47	55	28	37	39	-04	52	60	32	38	54	59	36	53	42	39	36	-06	53	33	02	65	45	45	20	34	19	15
7	20	30	18	46	19	15	24	35	41	02	29	23	23	49	44	30	17	05	43	08	37	10	35	28	11	30	53	-26	25	21	15	-11	40	25	-04
8	46	46	53	51	14	35	36	39	73	19	42	52	19	54	58	48	42	55	59	32	53	44	39	22	-02	57	34	10	54	40	48	33	43	25	14
9	30	22	27	24	-03	31	31	35	29	41	11	32	-02	41	27	20	24	20	37	09	28	40	27	11	08	38	32	-02	38	28	13	16	20	41	06
10	54	33	37	41	24	45	39	42	53	45	30	55	34	55	48	48	42	38	50	29	57	41	47	47	02	71	28	-02	48	45	25	08	51	43	16
11	19	28	25	35	32	34	17	54	23	24	30	20	29	49	40	38	-01	02	32	-02	38	29	22	34	16	40	29	-14	24	25	06	-10	41	30	-01
12	54	40	36	45	27	38	40	41	44	42	17	54	19	52	46	49	24	27	44	23	52	45	36	29	06	68	38	02	44	31	30	13	34	40	02
13	38	50	37	40	-07	18	23	33	45	23	06	46	-07	47	37	46	38	43	41	35	31	43	40	-11	-12	47	32	23	54	36	40	24	32	34	13
14	-19	09	10	18	-01	01	-19	16	32	-36	16	11	03	08	09	15	13	11	27	04	06	02	02	-20	-38	11	18	02	17	14	21	-03	11	-17	-11
15	13	33	37	39	03	17	17	46	46	-06	37	20	35	54	34	32	31	18	57	13	39	04	35	19	10	39	60	-23	29	45	13	-15	45	02	10
16	39	60	57	58	19	39	32	55	68	17	47	51	18	69	67	42	55	51	77	48	73	18	53	27	-02	75	52	-07	59	56	50	03	45	24	07
17	32	46	62	57	31	33	24	49	63	08	55	46	10	65	64	36	22	45	59	16	62	45	40	35	02	52	40	07	48	23	35	12	33	20	03
18	33	38	13	30	28	38	15	43	36	27	42	28	28	37	43	45	45	17	31	35	49	24	22	23	05	48	13	-21	13	43	20	06	51	20	25
19	59	43	43	53	18	09	55	20	52	30	11	54	-06	58	56	44	19	48	51	21	35	55	35	07	06	40	44	16	49	95	56	31	16	31	11
20	30	66	46	20	-12	10	09	32	29	04	04	35	-16	37	30	27	46	43	41	65	34	32	50	-13	-26	38	32	31	41	22	43	06	08	07	24
21	25	02	00	-03	09	-12	28	-23	-06	20	06	19	-10	04	24	-11	-05	03	-18	09	09	05	18	16	17	-08	-17	12	-05	-09	23	19	-09	31	16
22	47	20	19	46	42	21	47	23	42	36	53	39	35	50	61	41	33	21	48	21	42	22	35	57	23	54	33	-33	27	39	32	02	52	32	05
23	39	51	45	44	-08	14	29	38	64	13	21	41	08	56	42	60	38	36	65	30	35	41	31	02	-16	50	65	06	49	31	35	05	37	17	-05
24	29	53	44	50	24	34	16	65	62	10	37	37	27	54	46	56	46	43	67	38	54	37	36	23	-12	66	41	-16	51	51	37	00	49	04	07
25	30	45	19	21	03	20	09	25	26	11	15	22	12	32	26	32	72	23	38	64	28	14	66	-04	-28	44	12	06	31	43	30	-03	38	20	30

Table 9c

26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
—	24	36 55	52 36 46	38 -06 07 39	21 37 24 20 14	69 11 33 58 38 16	07 50 51 39 08 06	46 49 66 62 12 32 36 54	61 08 08 24 30 40 51 07 12	35 28 32 47 41 29 33 32 44 25	62 39 51 48 18 39 46 34 64 37 27	00 05 -06 20 12 17 11 38 19 00 19 04	46 64 57 64 25 34 45 57 67 29 50 54 26	55 58 50 44 34 23 18 30 40 15 12 57 60 51 20 75 40	40 42 34 44 34 -03 16 27 30 27 52 22 35 27 10 33 32 44 59	43 44 62 42 05 23 27 30 27 53 15 12 22 35 51 20 -21 44 57 22 39 43 26 41	44 54 26 64 61 25 18 43 25 62 28 12 57 16 45 37 60 41 27 44 57 34 40 52 39 53 38	45 29 33 60 55 41 18 23 15 12 57 17 45 37 05 07 60 46 52 34 62 43 47 21 -05 68 29 52 40 45 38	46 33 58 46 25 18 43 37 38 44 36 20 14 39 42 16 30 04 18 -14 24 11 30 15 24 -01 50 38 73 41 04 50 50 26 19 42 38 42 10 23 45 26 17 -08 -17 42 -12	47 35 35 13 42 30 05 45 10 44 34 26 33 19 19 20 24 02 05 02 07 18 37 24 03 14 16 08 -06 17 18 23 36 25	48 42 02 17 -03 53 42 25 57 29 47 26 17 20 24 02 05 02 07 18 37 24 03 14 16 08 -06 17 18 23 36 25	49 35 35 13 42 30 05 45 10 44 34 26 33 19 19 20 24 02 05 02 07 18 37 24 03 14 16 08 -06 17 18 23 36 25	50 13 -13 53 42 25 57 29 47 26 17 20 24 02 05 02 07 18 37 24 03 14 16 08 -06 17 18 23 36 25	51 42 52 40 16 38 36 51 03 34 12 19 20 24 02 05 02 07 18 37 24 03 14 16 08 -06 17 18 23 36 25	52 30 16 38 36 51 03 34 12 19 20 24 02 05 02 07 18 37 24 03 14 16 08 -06 17 18 23 36 25	53 05 16 25 57 29 47 26 17 20 24 02 05 02 07 18 37 24 03 14 16 08 -06 17 18 23 36 25	54 45 38 36 51 03 34 12 19 20 24 02 05 02 07 18 37 24 03 14 16 08 -06 17 18 23 36 25	55 10 36 36 51 03 34 12 19 20 24 02 05 02 07 18 37 24 03 14 16 08 -06 17 18 23 36 25	56 44 51 28 45 15 34 28 02 05 02 07 18 37 24 03 14 16 08 -06 17 18 23 36 25	57 34 03 47 26 17 20 24 02 05 02 07 18 37 24 03 14 16 08 -06 17 18 23 36 25	58 26 34 17 20 24 02 05 02 07 18 37 24 03 14 16 08 -06 17 18 23 36 25	59 33 12 19 20 24 02 05 02 07 18 37 24 03 14 16 08 -06 17 18 23 36 25	60 19 19 -02 02 05 02 07 18 37 24 03 14 16 08 -06 17 18 23 36 25	



Table 10

## Factor Loadings For Actual Leader Behavior Descriptions

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8	Factor 9
1	0.2890	0.3286	0.4843	-0.2807	0.1926	-0.0729	0.1966	-0.0433	-0.1049
2	0.0951	0.1555	0.5457	-0.3214	0.0927	0.0309	0.4635	0.1363	-0.0173
3	0.2918	0.1848	0.3221	-0.5387	-0.0756	-0.2077	0.1972	0.1623	0.0644
4	-0.0572	-0.7787	-0.0655	0.1390	-0.0714	0.2209	-0.1506	0.0242	-0.0846
5	0.1668	0.3329	0.3595	0.1107	-0.1717	-0.3430	0.1163	-0.3715	0.0122
6	0.4541	0.2510	0.2467	0.1329	-0.0259	-0.1161	0.4353	0.1038	0.0540
7	0.5585	0.0111	0.3109	-0.3458	0.1491	-0.2006	0.0569	-0.0006	0.0230
8	-0.4879	-0.2498	-0.0234	-0.1111	0.1779	0.1934	-0.4719	-0.0782	-0.3338
9	0.1840	-0.0988	0.6104	0.0061	-0.2358	-0.0542	0.2698	0.0272	-0.1010
10	0.2771	0.2870	0.5454	-0.1164	-0.2636	-0.0171	0.4215	0.0790	-0.0145
11	0.2631	0.1384	0.4482	-0.2597	-0.1172	0.1631	0.0324	0.3998	0.0464
12	0.2931	0.2070	0.6689	-0.0554	-0.3206	0.0817	0.1535	0.1333	0.0288
13	0.3889	0.1090	0.4530	0.4268	-0.2268	-0.1007	0.0668	0.0499	0.1976
14	0.1048	0.1159	-0.0784	-0.1489	0.2395	0.2595	-0.0608	0.0965	0.4618
15	0.6300	0.0510	0.0300	-0.2989	0.1487	0.0599	0.2166	0.0936	-0.1429
16	0.6002	0.2761	0.2777	-0.0575	0.0235	-0.0904	0.4264	0.2279	-0.0011
17	0.6009	0.3304	0.0070	0.0709	0.0055	-0.1066	0.1505	0.4838	0.1343
18	-0.0745	-0.3165	-0.1359	0.3132	0.2272	-0.0204	-0.5197	-0.1642	-0.1281
19	0.5529	0.0334	0.2417	0.1786	-0.3805	-0.3457	-0.0590	-0.0004	0.1225
20	0.3450	0.2392	0.5316	0.1579	-0.1625	-0.0734	-0.0827	0.0904	-0.0808
21	0.1558	-0.0541	-0.0696	-0.0977	0.1071	0.6422	0.0806	-0.0035	0.0613
22	-0.3028	-0.3332	-0.3201	0.4407	0.1701	0.3045	-0.2695	-0.0467	-0.0015
23	0.5882	0.1642	0.3912	-0.1387	-0.2179	-0.0141	-0.1093	0.1471	0.2936
24	0.5069	0.3325	0.2907	-0.1259	-0.0253	0.2752	0.4018	0.1392	0.1696
25	0.2179	0.5606	0.2929	0.0030	-0.2121	0.1218	0.2443	0.2771	-0.0024
26	-0.3145	-0.3608	-0.2482	-0.0504	0.6206	0.2870	-0.0609	0.0631	0.0275
27	0.4525	0.2410	0.3673	-0.1355	0.0020	-0.3583	0.2008	0.3041	0.2318
28	0.4379	0.1681	0.3521	0.0963	-0.1201	-0.1052	0.0105	0.4469	-0.2131
29	0.6220	0.3021	0.1533	-0.1122	-0.2179	-0.1817	0.0432	0.0830	0.1372
30	-0.2176	-0.6191	-0.0588	0.1035	0.1789	0.1347	-0.0853	0.0048	-0.1521
31	0.1469	0.0058	0.2634	-0.0226	-0.2458	0.0584	0.2198	0.4143	0.1894
32	-0.3276	-0.2056	-0.1936	0.1006	0.5042	0.4582	0.0741	-0.0141	0.0597
33	0.4279	-0.0362	0.2955	-0.0935	0.0004	0.2509	0.3619	0.4754	0.0425
34	0.7326	0.1531	0.1717	0.0318	-0.1257	-0.0560	0.2712	0.1163	0.2392
35	0.0429	-0.1530	-0.2459	0.0151	0.6988	0.1860	-0.1153	-0.0822	0.1465
36	-0.3671	-0.3670	0.1071	0.2862	0.1231	0.2296	-0.2927	-0.2419	-0.0095
37	0.5850	0.1339	0.3459	0.2593	-0.2475	-0.1606	0.1925	0.2709	0.0161
38	-0.1303	-0.0612	-0.0923	0.5997	0.0030	-0.1081	-0.0896	-0.1732	-0.0652
39	0.0955	0.1290	0.2044	-0.1080	-0.2290	-0.1421	0.2293	0.3361	-0.0129
40	-0.4901	-0.2743	-0.1435	0.0687	0.2305	0.4269	-0.3017	-0.3405	-0.0875
41	0.4975	0.2355	0.2035	-0.1187	-0.3039	0.1557	0.1312	-0.0791	0.2789
42	0.3789	0.6523	0.2318	-0.1737	-0.1794	0.0389	0.3272	0.0247	-0.0128
43	0.2315	0.3247	0.2417	0.2339	-0.3563	-0.1834	0.2859	0.1029	-0.2151
44	0.7787	0.2897	0.1405	-0.0340	-0.1073	0.0693	0.2785	0.0954	-0.0621
45	0.3319	0.5929	0.2193	0.0156	-0.1769	0.0599	0.2746	0.3638	-0.1435
46	0.4091	0.1376	0.3050	0.0791	0.0187	-0.1450	0.4975	0.4313	0.0007
47	0.3093	0.0421	0.2320	0.3117	-0.5727	-0.0383	0.1310	0.2993	0.1158
48	0.5117	0.3240	0.3662	-0.0606	-0.2133	-0.1188	0.1753	0.3372	-0.0016
49	-0.2868	-0.4063	-0.1736	0.2357	0.0696	0.2956	-0.3580	-0.0418	0.0642
50	-0.1367	-0.0752	0.1519	0.0857	0.0900	0.5599	-0.2339	0.1451	0.1585
51	0.4625	0.2356	0.4587	0.0236	-0.1011	0.0662	0.4818	0.1548	0.0146
52	0.8078	0.0024	0.1063	-0.0262	-0.0524	0.1302	0.0626	-0.0386	-0.1199
53	-0.0139	0.0140	0.0457	0.7015	-0.0606	0.0227	-0.0885	0.0405	0.0565
54	0.5536	0.2175	0.3075	0.4332	-0.1665	-0.0257	0.2651	0.0281	-0.0096
55	0.2605	0.0787	0.1665	-0.1803	0.0609	0.0415	0.6860	0.1110	-0.0692
56	0.1496	0.2575	0.3364	0.0210	-0.1989	-0.4092	0.1205	0.1259	0.1247
57	0.0681	-0.0874	-0.0368	0.4967	-0.3983	-0.2211	0.2425	0.0469	0.0187
58	0.3026	0.1547	0.1601	-0.4067	-0.0842	-0.0082	0.4751	0.0423	0.1447
59	0.0546	0.0440	0.5255	-0.0320	-0.1716	-0.3544	-0.0131	0.1796	0.1051
60	-0.0319	0.1212	-0.0608	0.1442	-0.1315	-0.1195	0.4256	-0.0718	-0.1396
61	0.4299	0.3375	0.1579	-0.1055	-0.1363	-0.1605	0.5725	0.1753	0.1570
62	-0.1144	0.1935	-0.0460	-0.4264	-0.0284	-0.0448	-0.0364	-0.1505	0.1912

Column Sum of Squared Loadings For Each Rotated Factor

10.05	4.83	5.51	3.65	3.35	2.96	4.92	2.72	1.22
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All Rotated Loadings Squared = 39.21

Percent of Total Score Variance Accounted For = 63.23

Percent of All Common Variance Accounted For = 85.27

Table 11

Factor Loadings For Actual Leader Behavior Descriptions By High Stressed  
Respondents  
N = 91

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8	Factor 9
1	0.2374	0.2368	-0.0062	0.0045	<u>0.6408</u>	0.1898	0.1949	-0.0164	0.0005
2	0.1247	0.2110	0.0305	-0.1523	<u>0.7248</u>	0.0825	0.0707	0.0081	0.0730
3	0.4240	0.5041	0.0707	-0.1834	<u>0.2654</u>	-0.0187	0.2420	-0.0913	0.0513
4	<u>-0.5756</u>	-0.1133	-0.1034	0.0635	-0.0639	0.0703	0.0068	0.0252	-0.2370
5	0.1626	0.5731	0.5293	0.0584	0.0966	0.1357	-0.0132	-0.0326	0.0782
6	0.3449	0.2919	0.3713	-0.2887	0.2214	0.1069	0.0682	-0.2556	-0.0742
7	0.4035	0.5477	0.0187	0.0808	0.2131	0.1768	0.2684	-0.1841	0.0447
8	<u>-0.5501</u>	-0.0205	-0.2681	0.3511	-0.1952	0.1072	-0.2184	0.0651	0.0318
9	-0.1485	<u>0.5962</u>	0.1419	-0.2536	0.2113	0.2928	0.0402	0.0561	-0.0584
10	0.2489	<u>0.7114</u>	0.0876	-0.0909	0.1746	0.1479	0.0798	-0.1140	0.0260
11	0.1651	0.4309	-0.0705	-0.1896	0.0811	0.5021	0.0592	0.1356	0.2173
12	0.2048	<u>0.5572</u>	0.0872	-0.0283	0.3434	0.2257	0.2565	0.1515	0.2687
13	0.0654	<u>0.5276</u>	0.1327	-0.0978	0.0999	0.2732	0.1798	0.1689	0.2388
14	-0.0070	0.0396	-0.2260	-0.4355	0.0656	-0.1025	0.2495	-0.1837	0.3080
15	0.0727	0.1519	-0.0696	-0.1332	0.0394	0.0799	0.0583	-0.0383	<u>0.5167</u>
16	0.3424	0.3002	-0.1015	-0.1024	0.3948	0.2577	0.1254	0.0909	0.4249
17	<u>0.5573</u>	0.3197	0.0275	-0.0567	0.3236	0.3177	0.1046	-0.0475	0.1688
18	<u>-0.5160</u>	-0.1739	-0.0370	0.0159	0.0355	-0.2049	0.0984	-0.0841	0.3585
19	0.0557	0.5571	0.4754	0.0955	0.0021	0.1718	0.0744	0.0459	0.1287
20	0.0497	0.1690	0.0951	-0.1202	0.2432	0.1524	<u>0.6783</u>	-0.0656	-0.0645
21	0.0314	0.0401	-0.2648	0.0991	0.0741	0.2421	<u>0.0469</u>	-0.4748	-0.0147
22	-0.3922	-0.4735	0.0833	0.0456	-0.0878	0.0214	0.0039	-0.2511	0.2284
23	0.0325	0.5121	0.0629	-0.1963	0.1809	0.1110	0.4997	0.1166	0.0064
24	0.2541	<u>0.5420</u>	-0.1000	-0.1456	0.2759	0.2092	0.3132	0.0397	0.2209
25	0.1497	0.1753	0.0230	-0.2147	0.2498	0.2828	0.4659	0.0260	0.0955
26	-0.1913	-0.2343	-0.4767	0.2960	0.0951	-0.3021	0.0999	-0.1385	-0.0383
27	0.3999	0.2899	0.1311	-0.2876	0.2174	0.4351	0.2862	-0.0092	0.1485
28	0.0076	-0.0068	0.2650	-0.0648	0.2970	0.4464	0.1518	0.1359	-0.1763
29	0.1997	0.2145	0.2630	-0.1261	-0.0059	<u>0.5480</u>	0.2801	-0.1227	0.1184
30	-0.2627	-0.1517	-0.0803	<u>0.5298</u>	-0.3229	-0.1805	-0.2197	0.1480	-0.0872
31	-0.0736	0.2311	0.1557	-0.1111	0.3225	<u>0.5906</u>	0.1224	-0.2498	0.0087
32	-0.0188	-0.0561	<u>-0.5708</u>	0.2886	-0.0823	-0.1842	-0.0848	0.0067	0.0452
33	0.2623	0.3517	-0.0541	0.1001	0.3426	0.4727	0.2361	0.0921	-0.0343
34	0.2423	<u>0.5524</u>	0.2035	0.0550	0.3467	0.0814	0.1195	-0.2101	0.0897
35	-0.0548	-0.0246	<u>-0.6666</u>	0.1044	0.0642	0.1322	-0.0265	-0.1590	0.0562
36	<u>-0.5410</u>	-0.0334	-0.2412	0.1451	-0.0283	-0.0531	-0.0545	0.0709	0.0393
37	0.1067	0.5254	0.4225	-0.1699	0.0992	0.2104	0.2801	0.1513	-0.0907
38	-0.0919	-0.1532	0.2043	0.1222	-0.0614	-0.1910	-0.3953	0.4097	-0.0984
39	0.1533	0.4649	0.1080	-0.4244	-0.0015	0.4550	0.2114	0.0250	0.1384
40	-0.3650	-0.3342	-0.1593	<u>0.5088</u>	-0.1733	-0.2099	0.0422	-0.0796	0.1816
41	0.1995	0.4139	0.0273	-0.2079	-0.0699	0.5389	0.1808	0.0126	0.0044
42	0.4370	0.4626	0.1090	-0.2269	0.1976	0.5180	0.2355	-0.0532	-0.1166
43	0.2920	0.2648	<u>0.5022</u>	-0.1608	0.2157	0.1300	0.2345	-0.0013	-0.3572
44	0.2534	0.4561	0.0986	-0.2614	0.1197	0.3359	0.4042	-0.0625	-0.1988
45	0.3221	0.3817	-0.0475	0.0057	0.0401	0.4469	0.4993	0.1636	-0.1012
46	0.2929	0.2789	-0.0609	-0.0667	0.4247	0.4956	0.0984	0.0291	-0.0654
47	0.0296	0.1180	0.3970	0.0437	0.0986	0.4907	0.1902	0.0985	0.2050
48	0.1312	0.3586	0.1334	-0.3171	0.2831	0.4444	0.3418	0.0523	0.0763
49	-0.1713	-0.1001	-0.1518	<u>0.6546</u>	-0.0481	-0.1411	-0.1871	-0.1368	-0.1632
50	-0.1107	0.2294	-0.0465	<u>0.8677</u>	0.1868	-0.3245	-0.0374	-0.3713	-0.0167
51	0.3712	0.4615	0.0784	-0.0243	0.4350	0.1600	0.2185	0.0850	0.0972
52	0.1578	0.4795	0.0426	-0.0437	0.0625	0.1842	0.4144	-0.1805	0.0930
53	0.1395	-0.1238	0.4440	0.0592	0.1327	0.0135	-0.1351	0.3416	0.0777
54	0.1498	0.1618	0.3474	-0.2332	0.0881	0.3974	0.4311	0.1889	0.2034
55	<u>0.5709</u>	0.1471	-0.1327	0.0364	0.1229	0.2238	0.2645	0.1876	0.1434
56	-0.0174	0.1116	0.0389	0.0509	0.0696	0.1958	0.0001	<u>0.5886</u>	-0.0404
57	-0.1354	0.0998	<u>0.5303</u>	0.1216	0.0105	0.1652	0.0979	0.0381	-0.0528
58	0.3971	0.4209	0.0931	-0.2858	0.1161	0.0892	0.2299	-0.1985	0.1168
59	0.0319	0.1417	-0.0360	-0.0386	0.2762	-0.0121	-0.0366	0.2664	-0.0189
60	0.1961	0.0393	0.4136	0.0106	-0.1938	-0.0282	-0.1563	-0.1650	-0.0883
61	<u>0.5817</u>	0.3898	-0.0932	-0.1987	0.2061	0.1867	0.1532	0.0702	0.0145
62	-0.0760	-0.1026	-0.0129	0.0633	0.1018	-0.1069	-0.4281	0.2150	-0.2160

Column Sum of Squared Loadings For Each Rotated Factor

4.93    7.43    3.80    2.93    3.35    4.96    3.63    1.95    1.68

All Rotated Loadings Squared = 34.66

Percent of Total Score Variance Accounted For = 55.91

Percent of All Common Variance Accounted For = 79.12

Table 12

Factor Loadings for Actual Leader Behavior Descriptions By Low Stressed  
Respondents  
N = 91

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8
1	<u>0.6995</u>	-0.1627	-0.1684	0.0323	-0.0643	-0.1961	0.0480	0.1986
2	<u>0.6058</u>	-0.1220	-0.1967	0.0808	-0.2778	0.0447	0.0172	0.1055
3	<u>0.7205</u>	-0.1722	-0.3012	0.1906	0.1630	-0.0677	0.0487	-0.0692
4	-0.3882	<u>0.5490</u>	0.1305	-0.0634	-0.1234	-0.3145	0.0691	-0.0620
5	0.5540	-0.0440	-0.4955	0.1191	0.1455	0.0726	-0.1447	0.1330
6	<u>0.4994</u>	-0.2584	-0.2999	0.1512	-0.0442	0.1295	0.0406	0.2628
7	<u>0.6130</u>	-0.0825	-0.1562	0.2836	0.1120	0.0008	0.1097	0.1399
8	-0.3034	0.5068	0.2298	-0.4685	-0.0091	-0.1567	0.0215	-0.1175
9	<u>0.6103</u>	0.0225	-0.1461	0.0724	0.1048	0.2825	0.1763	0.1506
10	<u>0.7333</u>	-0.1118	-0.1973	0.3262	0.0014	0.0871	-0.0277	0.2665
11	<u>0.5830</u>	-0.0078	-0.1955	0.2192	-0.1524	0.1292	0.0424	0.1986
12	<u>0.5777</u>	0.1054	-0.2584	0.2246	-0.2641	0.1055	0.1737	0.1537
13	<u>0.4549</u>	0.1852	-0.3145	0.2744	-0.1405	0.0562	0.2804	0.3367
14	0.1731	-0.1700	0.0208	<u>0.5471</u>	-0.0807	-0.1455	0.0970	0.0482
15	0.2361	-0.0186	-0.0438	<u>0.5037</u>	-0.0735	0.0563	0.0007	-0.0122
16	<u>0.6876</u>	-0.1639	-0.1352	0.2489	-0.0452	0.0012	0.1196	0.2663
17	0.5143	-0.4237	0.0040	0.1930	0.1319	-0.1493	0.0367	-0.0417
18	-0.1291	<u>0.6543</u>	0.0521	-0.0277	-0.0903	0.0889	0.0030	-0.0303
19	0.2316	<u>0.1105</u>	<u>-0.7387</u>	0.0065	0.0492	-0.1463	0.1215	-0.0410
20	<u>0.6560</u>	-0.1905	-0.3319	0.1481	-0.2350	0.0665	0.2876	-0.1504
21	-0.0269	-0.1124	0.3217	0.0723	-0.3744	-0.0827	0.0724	0.0239
22	-0.3950	0.5232	0.3457	-0.1214	-0.2012	-0.0945	-0.2988	0.0723
23	0.5396	-0.0461	-0.2357	0.4832	-0.0714	0.0389	0.1799	-0.0731
24	<u>0.5677</u>	-0.3048	-0.1483	0.3582	-0.0991	-0.1091	0.2428	-0.1698
25	<u>0.5542</u>	-0.1331	-0.2561	0.3914	0.1538	0.1848	0.2360	-0.0665
26	-0.2871	0.3702	<u>0.5124</u>	-0.2047	-0.0766	-0.3225	-0.1602	-0.0483
27	<u>0.6168</u>	-0.2313	-0.0893	0.3346	-0.0105	0.1510	0.3394	0.1101
28	<u>0.5930</u>	-0.0974	-0.0780	0.1090	0.1348	0.2409	-0.0358	-0.1340
29	0.4994	-0.1107	-0.2899	0.5735	0.1864	0.1761	0.0677	0.0240
30	-0.2603	<u>0.7101</u>	0.1385	-0.0428	-0.0214	-0.2509	-0.2773	-0.0798
31	<u>0.6526</u>	-0.0160	0.0859	0.2912	-0.0461	0.1350	-0.1683	-0.0394
32	-0.2244	0.1934	<u>0.6089</u>	0.0336	-0.0573	-0.3025	-0.0574	-0.0571
33	0.5060	-0.0301	0.0123	0.3949	-0.1077	-0.0839	0.0725	0.0086
34	0.4051	-0.1913	0.0733	0.4993	0.0904	0.1046	-0.0006	-0.1233
35	0.0968	0.1143	<u>0.6772</u>	-0.1103	-0.1119	-0.3343	-0.0610	0.0643
36	-0.2508	<u>0.6769</u>	0.0711	-0.1572	-0.1540	0.0553	-0.0986	0.1708
37	<u>0.5878</u>	0.2238	-0.2656	0.2892	0.0376	0.3021	0.1645	-0.0983
38	0.2579	0.4866	-0.0432	-0.3609	0.1734	-0.0479	0.1620	0.0586
39	0.5058	-0.2222	-0.3030	0.4164	0.0787	0.1138	0.1833	0.0097
40	-0.3394	<u>0.4798</u>	0.3622	-0.2750	-0.1483	-0.2155	-0.1653	-0.1139
41	<u>0.5128</u>	-0.0788	-0.1642	0.3387	0.0917	0.1635	0.2437	0.0452
42	<u>0.7058</u>	-0.1990	-0.1876	0.0817	0.2319	0.1357	0.3266	-0.1478
43	0.4631	-0.1854	-0.1501	0.0743	0.0681	0.4335	0.3408	-0.2543
44	<u>0.6692</u>	-0.3437	-0.1702	0.1834	0.0539	0.1447	0.2983	-0.0384
45	<u>0.7069</u>	-0.3975	0.0445	0.0433	0.0753	0.1333	0.3455	-0.0665
46	<u>0.5951</u>	-0.1580	-0.1637	0.1325	0.0524	0.0088	0.2479	0.1683
47	0.4971	0.0127	-0.5069	0.1730	0.0852	0.0564	0.3230	-0.1399
48	<u>0.6890</u>	-0.1146	-0.1853	0.1285	-0.1332	0.0089	0.3788	-0.1731
49	-0.3765	<u>0.7249</u>	0.2223	-0.0617	-0.1003	-0.1800	-0.3288	-0.1854
50	-0.1627	0.4062	0.5530	-0.0525	-0.0832	0.0756	0.0028	-0.1311
51	<u>0.7841</u>	-0.2161	-0.1216	0.1372	-0.1500	0.1663	0.0695	0.0005
52	0.4641	-0.1138	-0.1115	0.5542	-0.0723	0.0491	0.3046	-0.0269
53	0.2270	<u>0.6424</u>	-0.1798	0.0418	0.0735	-0.0056	0.1412	-0.0649
54	0.4101	-0.0252	-0.2265	0.2559	0.0536	0.1688	<u>0.6320</u>	0.0984
55	0.2005	-0.1150	0.1680	0.3207	0.1643	-0.754	<u>0.3167</u>	0.2822
56	0.1981	-0.1403	-0.2819	-0.0247	-0.0133	<u>0.5726</u>	0.0798	0.2071
57	-0.0495	-0.0658	-0.1144	0.0102	<u>0.6072</u>	0.0462	0.1194	-0.0267
58	0.3899	-0.2486	-0.2433	0.1745	0.1979	-0.0019	0.2602	0.3008
59	<u>0.5227</u>	0.2323	-0.061	0.1518	0.0104	0.2710	-0.0289	0.1329
60	-0.0636	-0.2320	-0.0397	-0.0600	<u>0.5721</u>	-0.0382	-0.0252	0.0668
61	<u>0.5300</u>	-0.3002	-0.1696	0.2601	0.2382	0.1436	0.2069	0.1890
62	0.0455	-0.0326	-0.0112	-0.0441	0.0026	0.0504	-0.0038	0.4530

Column Sum of Squared Loadings For Each Rotated Factor

14.75      5.56      4.53      4.22      1.76      1.93      2.60      1.43

All Rotated Loadings Squared = 36.79

Percent of Total Score Variance Accounted For = 59.33

Percent of All Common Variance Accounted For = 80.08



Table 13A

Differential Conceptualizations of Actual Leader Behavior

By High and Low Stress Respondents

Associated Items in  
Same Factor for High  
Stress Respondents

Items Common to  
Factor Structure of  
Both Analyses

Associated Items in  
Same Factor for Low  
Stress Respondents

None

30-Doesn't back down  
when he ought to  
stand firm in deal-  
ing with his troops.

40-Doesn't get things  
all tangled up.

49-Doesn't get confused  
when too many demands  
are made of him.

4-Not hesitant about  
taking initiative  
in group.

18-Doesn't let members  
take advantage of  
him.

36-Does not let some  
members have authority  
he should keep.

53-Permits the group to  
set its own pace.

7-Encourages use of  
uniform procedures.

9-Does little things  
to make it pleasant.

10-Keeps group working  
together.

12-Encourage initiative  
in group members.

13-Uses suggestions made  
by group.

24-Pushes for increased  
efficiency

Table 13B

34-Makes sure that his part in the group is understood by each member.

1-Acts as spokesman of the group.

2-Makes pep talks to stimulate group.

3-Lets group members know what is expected.

6-Makes accurate decisions.

11-Tries out his ideas in group.

16-Is a very persuasive talker.

20-Settles conflicts when they occur.

25-Things usually turn out as he predicts.

27-Handles complex problems efficiently.

28-Is able to tolerate postponement and uncertainty.

31-Gets his superiors to act for welfare of group.

37-Looks out for the personal welfare of members.

39-Sees that work of group is coordinated.

41-Schedules the work to be done.

42-Takes full charge in emergencies.

44-Drives hard when there is a job to be done.

45-Can reduce a madhouse to order.

Table 13C

- 46-Persuades others of advantages of his ideas.
- 48-Anticipates a problem and plans for them.
- 51-Can inspire enthusiasm for a project.
- 59-Encourages participation at desired level.
- 61-Overall performance rating.
- 32-Keeps control doesn't blow up.
- 35-Allows members freedom of action.
- 43-Is willing to make changes.
- 57-Did not give too much direction.
- 19-Treats all group members as equals.
- 26-Doesn't misuse his authority.
- 4-Not hesitant about taking initiative in group.
- 18-Doesn't let members take advantage of him.
- 36-Does not let some members have authority he should keep.
- 8-Doesn't fail to take necessary action.
- 30-Doesn't back down when he ought to stand firm in dealing with his troops.
- 17-Makes his attitudes clear.
- 40-Doesn't get things all tangled up.
- 55-Most concerned with looking for sound opportunities to show what he can do.
- 49-Does not get confused when too many demands are made of him.
- 61-Overall performance rating.
- 53-Permits the group to set its own pace.



Table 14

## Self Descriptions of High and Low Performance Leaders

(High Score = Favorable End of 17 point scale with range of 5-85 and mid-point of 45)

Bipolar Scale	Mean Score High Performance Leaders (N=41-43)	Standard Deviation	Mean Score Low Performance Leaders (N=41-42)	Standard Deviation	t	Significance Level
Efficient-Inefficient	70.70	6.61	63.87	10.5	3.5370	.001
Poised, Tough-Easily upset	65.40	9.2	55.85	15.2	3.4200	.001
Cheerful-Gloomy, depressed	68.26	8.95	59.52	14.4	3.3000	.01
Interesting-Boring	63.57	10.54	53.69	16.58	3.2025	.01
Energetic, gung-ho - Slow, non-energetic	63.40	10.77	56.55	13.25	2.5685	.02
Independent, self-sufficient-- Dependent on others	68.69	11.40	61.55	14.25	2.4727	.02
Bold, self-assured - Timid, Hesitant	66.16	10.72	60.	12.15	2.4471	.02
Considerate, Mature - Inconsiderate, demanding	71.30	8.50	65.90	11.81	2.3860	.02
Approachable, attentive, sociable - Aloof, distant, self-contained	67.56	13.05	60.36	15.1	2.3050	.03

Table 15A

Significant Differences From Average Leader Behavior

For High and Low Performance Leaders

Questions for which  
High Performance  
Leaders Differ  
Significantly Above  
Average Leaders

Questions for which  
which Both High -  
Low Performance Leaders  
Differ Significantly  
from Average Leaders

Questions for which  
Low Performance  
Leaders Differ  
Significantly Below  
Average Leaders

24-Pushes for increased  
efficiency

44-Drives hard when  
there is job to be  
done

55-Looking for sound  
opportunities to show  
what he can do

12-Encourages initiative  
in group members

15-Working hard for  
good ratings

3-Lets group members  
know what is expected  
of them

17-Makes his attitudes  
clear to the group

39-Sees that work of  
group is coordinated

58-Gives adequate direc-  
tion

34-Makes sure each man  
understands his part

40-Doesn't get things all  
tangled up

49-Doesn't get confused  
when too many demands  
are made of him

27-Efficient handling  
of complex problems

45-Able to reduce a  
madhouse to system  
and order

48-Anticipates  
problems and plans  
for them

Table 15B

2-Makes pep talks to  
stimulate group

16-Is a very persuasive  
talker

51-Can inspire enthusiasm  
for a project

33-Speaks from a strong  
inner conviction

46-Persuades others that  
his ideas are to their  
advantage

8-Takes necessary  
action

22-Leader in fact, not  
in name only

30-Does not back down  
when he ought to  
stand firm in deal-  
ing with his troops

56-Tendency to use  
threats and punish-  
ments more than  
rewards

42-Takes full charge  
when emergencies  
arise

36-Doesn't let others  
have authority he  
should keep

25-Things turn out  
as he predicts

28-Able to tolerate  
postponement and  
uncertainty

31-Gets superiors to  
act for welfare  
of group members

60-Extent to which  
he did not over-  
consult with each  
member

Table 16A

Largest Shortfalls of Actual Leadership Behavior  
From Normative Behavior

Item Number		Normative Mean and Standard Deviation	Difference from Normative Mean Score for All Leaders	Difference from Normative Mean Score for High Performance Leaders	Correlation of Leader Behavior Score with Combined Performance Score
20.	Leader settles conflicts when they occur in group	4.73(.58)	-1.26	-1.20	.12
48.	Leader anticipates prob- lems and plans for them	4.74(.48)	-1.29	-1.11	.34
9.	Leader does little things to make it pleasant to be group member	4.34(.92)	-1.18	-1.07	.23
27.	Leader handles complex problms efficiently	4.74(.47)	-1.22	-.97	.35
2.	Leader makes pep talks to stimulate group	4.35(.72)	-1.19	-.90	.51
23.	Leader gives advance notice of changes	4.64(.61)	-1.07	-.90	.33
31.	Leader gets his sup- eriors to act for the welfare of group mem- bers	4.55(.85)	-1.19	-.88	.38
10.	Leader keeps group working together	4.88(.33)	-1.11	-.88	.52

Table 16B

Item Number	Normative Mean and Standard Deviation	Difference from Normative Mean Score for All Leaders	Difference from Normative Mean Score for High Performance Leaders	Correlation of Leader Behavior Score with Combined Performance Score
1. Leader acts as spokes- man of group	4.63(.56)	-1.05	-.88	.25
12. Leader encourages in- itiative in group members	4.57(.64)	-1.04	-.85	.39
16. Leader is very persua- sive talker	4.50(.67)	-1.17	-.82	.65
51. Leader can inspire enthusiasm for a project	4.68(.51)	-1.13	-.81	.60
41. Leader schedules work to be done	4.76(.52)	-.99	-.80	.45
33. Leader speaks from a strong inner conviction	4.42(.86)	-1.08	-.78	.41
8. Leader takes necessary action	4.87(.34)	-1.03	-.78	.53

TABLE 17

Normative and Descriptive Leader Scores and Standard Deviations  
With High-Low Performance Behavior Area Breakout

	Normative (how leader should be) N=295-353	High Performance Leaders N=46 Means	All Leaders N=104 Means	Low Performance Leaders N=42 Means	t <sup>a</sup>
1. INITIATING STRUCTURE BEHAVIOR	4.60	4.02(.22)	3.82(.36)	3.59(.42)	5.8630
2. CONSIDERATION BEHAVIOR	4.45	3.89(.285)	3.76(.42)	3.60(.52)	3.1641
3. DECISIVENESS BEHAVIOR	4.88	4.14(.34)	3.87(.45)	3.61(.41)	6.4801
4. GOAL EMPHASIS BEHAVIOR	4.32	3.78(.28)	3.50(.45)	3.21(.43)	7.2671
5. SUPPORT BEHAVIOR	5.07	4.44(.39)	4.28(.48)	4.08(.54)	3.5411
6. CONSULTATIVE- PARTICIPATIVE DECISION-MAKING BEHAVIOR	6.15	4.82(.37)	4.70(.45)	4.53(.50)	3.0415
7. WORK FACILITA- TION BEHAVIOR	5.74	4.66(.34)	4.42(.47)	4.14(.49)	5.6975

Note: Score values based on the following scale

Never	Seldom	Occasionally	Often	Always
1	2	3	4	5

<sup>a</sup> For 87 degrees of freedom the .001 level of significance requires a t of 3.4160



TABLE 18

## LEADER LPC SCORES WITH HIGH - LOW PERFORMANCE BREAKOUT

	Sample Size	Mean Score	Standard Deviation	t <sup>a</sup>
<u>TASK LPC SCORE</u>				
High Performance Leaders	42 means of means	32.89	11.92	
All Leaders	107 means of means	37.48	13.28	
Low Performance Leaders	43 means of means	42.88	12.83	3.6761
<u>SOCIAL LPC SCORE</u>				
High Performance Leaders	42 means of means	32.57	8.96	
All Leaders	107 means of means	34.95	10.00	
Low Performance Leaders	43 means of means	38.32	9.92	2.7725
<u>DIFFERENCE SCORE (SOCIAL LPC SCORE - TASK LPC SCORE)</u>				
High Performance Leaders	42 means of means	-.32	10.24	
All Leaders	107 means of means	-2.53	12.02	
Low Performance Leaders	43 means of means	-4.56	13.12	
<u>LPC SCORE</u>				
High Performance Leaders	42 means of means	31.12	7.86	
All Leaders	107 means of means	33.76	8.97	
Low Performance Leaders	43 means of means	37.71	8.51	3.6669

<sup>a</sup> For 84 degrees of freedom the .01 level of significance requires a t of 2.6380

Table 19A

## Relationship Between Leader LPC Score and Leader Behavior

## As Moderated By Leader-Member Relations

	Above Average Leader-Member Relations (Mean=4.23 Std. D. = .13)				Below Average Leader-Member Relations (Mean=3.52 Std. D. = .39)			
	Means and Standard Deviations			Correlation of Behavior with LPC Score <sup>a</sup>	Means and Standard Deviations			Correlation of Behavior with LPC Score <sup>b</sup>
LPC	Hi-LPC Leaders	Mid-LPC Leaders	Low-LPC Leaders		Hi-LPC Leaders	Mid-LPC Leaders	Low-LPC Leaders	
MLBDQ Item #	N=7	N=11	N=8	N=26	N=3	N=12	N=5	N=20
1	48.42 (10.80)	34.42 (2.81)	23.62 (4.18)		41.05 (2.)	35.23 (2.86)	26.25 (4.95)	
	(.26)	(.42)	(.32)	-.41	(.62)	(.63)	(.70)	.25
2	2.89 (.72)	3.18 (.68)	3.57 (.56)	-.42	2.93 (.13)	3.06 (.56)	2.64 (.93)	.10
4	3.40 (.54)	3.81 (.53)	4.25* (.35)	-.68	3.32 (.39)	3.58 (.64)	3.84 (.17)	-.26
6	3.82 (.63)	4.06* (.19)	4.14 (.36)	-.50	3.75 (.46)	3.66 (.32)	3.76 (.58)	-.12
10	3.76 (.37)	4.01* (.30)	4.33* (.30)	-.57	3.45 (.79)	3.65 (.48)	3.34 (.51)	-.03
11	3.44 (.23)	3.62 (.34)	3.95 (.31)	-.40	3.29 (.40)	3.42 (.40)	3.54 (.35)	-.21
16	3.19 (.39)	3.51 (.49)	3.90* (.43)	-.50	3.09 (.41)	3.37 (.56)	2.98 (.73)	-.02
17	3.77 (.53)	4.25 (.46)	4.33 (.38)	-.31	3.55 (.39)	3.81 (.53)	4.16 (.56)	-.42
18	3.74 (.53)	4.03 (.43)	4.31 (.55)	-.45	3.53 (.24)	3.82 (.47)	3.35 (1.37)	.17
22	3.90 (.51)	4.00 (.55)	4.53* (.41)	-.57	3.45 (.21)	3.83 (.62)	3.18 (.68)	.11
24	3.64 (.53)	3.91 (.28)	4.31 (.41)	-.57	3.44 (.51)	3.72 (.62)	3.35 (.88)	-.03
27	3.33 (.67)	3.89* (.40)	4.26* (.41)	-.55	3.25 (.25)	3.46 (.45)	3.16 (.26) N=4	-.01 N=19
33	3.39 (.73)	3.57 (.40)	3.68 (.50)	-.41	2.95 (.48)	3.22 (.73)	3.05 (.74)	.00

Table 19B

## Relationship Between Leader LPC Score and Leader Behavior

As Moderated By Leader-Member Relations

Item #	Above Average Leader-Member Relations				Below Average Leader-Member Relations			
	Hi-LPC Leaders	Mid-LPC Leaders	Low-LPC Leaders	Correlation of Behavior with LPC Score <sup>a</sup>	Hi-LPC Leaders	Mid-LPC Leaders	Low-LPC Leaders	Correlation of Behavior with LPC Score <sup>b</sup>
36	3.44 (.70)	3.95 (.48)	3.96 (.35)	-.59	3.18 (.17)	3.83 (.51)	3.69 (.32)	-.20
39	4.04* (.25)	4.05 (.32)	4.53* (.33)	-.48	3.32 (.39)	3.83 (.40)	3.44 (.53)	-.20
40	4.01 (.56)	4.23 (.39)	4.54 (.31)	-.53	3.73 (.06)	3.91 (.37)	3.71 (.90)	-.11
41	3.59* (.41)	4.06* (.40)	4.33 (.34)	-.62	2.92 (.14)	3.71 (.28)	3.39 (.82)	-.15
42	3.79 (.57)	4.26 (.44)N=10	4.40 (.38)	-.63 N=25	3.25 (.90)	3.94 (.55)	3.71 N=4 (.54)	-.31 N=19
44	4.06 (.52)	4.17 (.35)	4.60* (.335)	-.53	3.69 (.34)	4.00 (.59)	3.68 (.47)	-.04
45	3.73 (.42)	3.63N=10 (.34)	4.12* (.45)	-.46 N=25	3.03 (1.06)	3.55 (.70)	3.16 N=4 (.59)	-.07 N=19
46	3.26 (.63)	3.44 (.39)	3.81 (.42)	-.40	2.97 (.29)	3.24 (.53)	3.18 (.51)	-.22
49	3.75 (.86)	3.92 (.40)	4.10 (.59)	-.44	3.19 (.39)	3.67 (.83)	3.93 (1.37)	-.29
51	3.44 (.48)	3.81 (.49)	4.13* (.55)	-.53	3.07 (.59)	3.53 (.45)	2.91 (.78)	.05
56	7.45 (.66)	7.78 (.78)	8.63 (1.44)	-.40	8.11 (1.50)	6.89 (.19)	6.69 (1.88)	.08
58	8.28 (1.55)	9.33 (1.30)	10.37 (.25)	-.56	9.04 (.34)	9.61 (1.21)	8.05 (2.28)	.16
60	10.26 (2.27)	11.14 (.79)	10.23 (1.94)	-.06	10.18 (1.07)	10.14 (1.54)	8.47 (2.04)	.44

Table 19C

## Relationship Between Leader LPC Score and Leader Behavior

## As Moderated By Leader-Member Relations

Item #	Above Average Leader-Member Relations				Below Average Leader-Member Relations			
	Hi-LPC Leaders	Mid-LPC Leaders	Low-LPC Leaders	Correlation of Behavior with LPC Score <sup>a</sup>	Hi-LPC Leaders	Mid-LPC Leaders	Low-LPC Leaders	Correlation of Behavior with LPC Score <sup>b</sup>
Beh. Areas								
I.S.	3.81 (.29)	4.00 (.18)	4.17* (.18)	-.55	3.43 (.38)	3.81 (.26)	3.60 (.34)	-.20
Dec.	3.77 (.41)	4.04 (.33)	4.35* (.33)	-.65	3.39 (.04)	3.80 (.41)	3.68 (.20)	-.22
G.E.	3.35 (.47)	3.58 (.33)	3.95* (.42)	-.52	3.30 (.33)	3.53 (.38)	3.15 (.62)	-.01
Sup.	4.53 (.24)	4.56* (.14)	4.73* (.15)	-.58	3.95 (.66)	3.92 (.43)	3.79 (.67)	-.06
W.F.	4.47 (.21)	4.67* (.25)	4.89* (.29)	-.51	3.96 (.52)	4.26 (.38)	4.05 (.36)	-.11

<sup>a</sup>For N=26 the 5% level of significance is .381, the 1% level .487

<sup>b</sup>For N=20 the 5% level is .433, the 1% level .549

\*This mean score value is significantly different from the corresponding column value for Below Average Relations at the 5% level or better.

Note: the Leader-Member Relations Score is the average of MLBDQ Items 5, 9, 26, 32, 37, and 47.

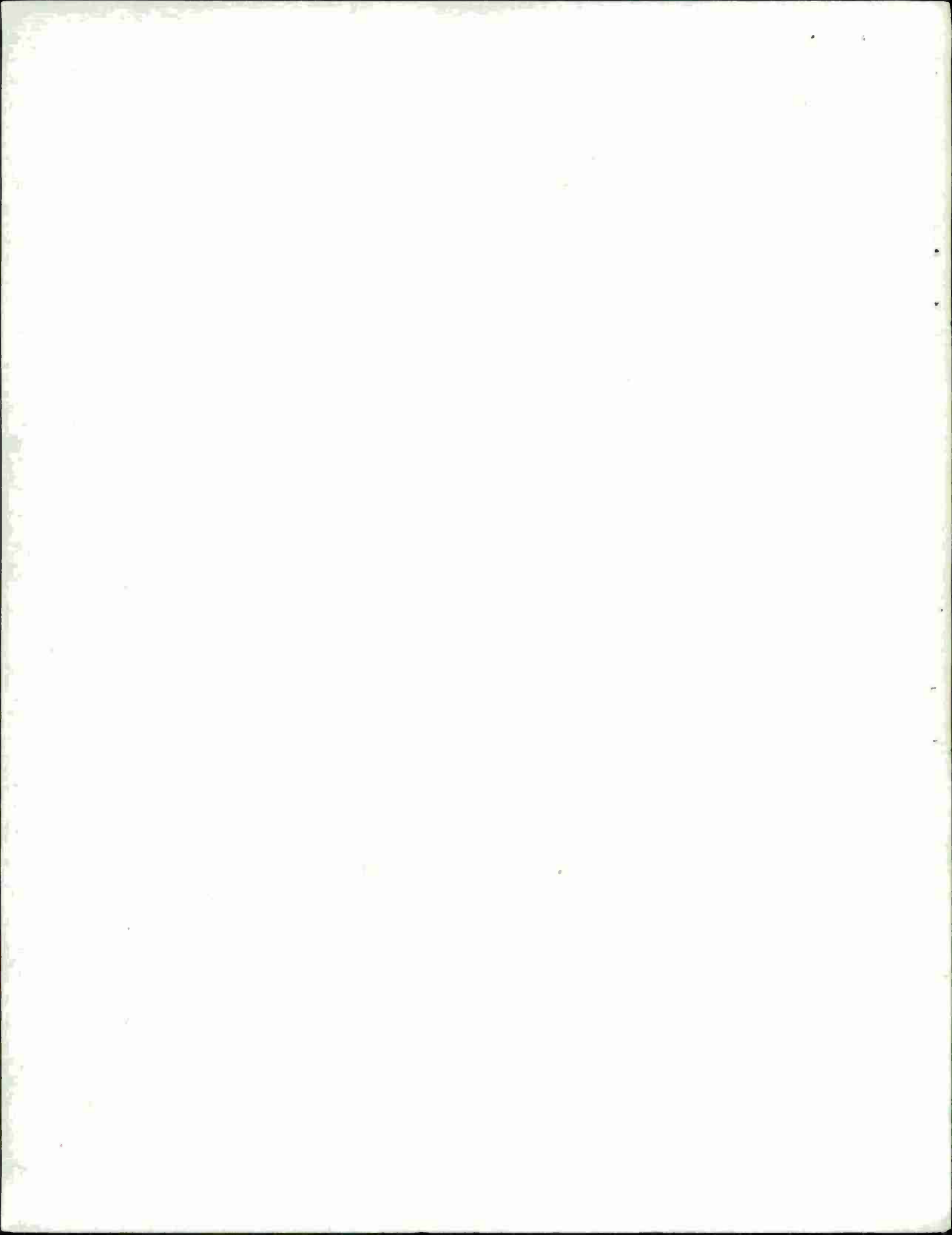
Table 20  
Correlations Between Selected Leader  
Behaviors and Consolidated Performance  
N=71<sup>1</sup>

Behavior Areas		r
Initiating Structure		.63
Consideration		.38
Decisiveness		.74
Goal Emphasis		.68
Support		.47
Consultative-Participation Decision-Making		.35
Work Facilitation		.64
MLBDQ Item #		
3	Lets group members know what is expected	.54
15	Is working hard for good ratings	.54
16	Very persuasive talker	.65
17	Makes his attitudes clear to the group	.54
22	Not leader in name only	.62
24	Pushes for increased efficiency	.63
34	Makes sure part understood by group members	.54
36	Does not let others have authority he should keep	.64
39	Sees that work is coordinated	.57
40	Doesn't get things all tangled up	.63
42	Takes full charge in emergencies	.47
44	Drives hard when there's a job to do	.61
46	Persuades others his ideas are to their advantage	.60
51	Can inspire enthusiasm for a project	.60
55	Looking for sound opportunities to show what he can do	.66
58	Gave adequate direction	.64

<sup>1</sup>For N=71 the .001 level of significance for r is .38

APPENDIX A





NAME \_\_\_\_\_ DATE \_\_\_\_\_

This is a description of (please check one): My Least Preferred Co-worker \_\_\_\_\_ Me \_\_\_\_\_

**INSTRUCTIONS:** Think of the one person with whom you have worked least well. He or she may be someone you work with now or in the past. You may or may not like this person least well. Describe this person by placing one checkmark on each scale. You may check between boxes as well as within boxes. If you feel that neither term on the scale properly describes the person, or you have no basis for describing the person on that scale, check the midpoint. The farther you go from the middle of each scale toward the end before placing your checkmark, the more you feel the person has the quality described. **BE SURE TO CHECK EVERY SCALE.** Please describe yourself on the other copy of this form.

- |  |   |   |   |   |   |   |   |   |   |   |                                   |
|--|---|---|---|---|---|---|---|---|---|---|-----------------------------------|
| 1. Pleasant                            | : | : | : | : | : | : | : | : | : | : | Unpleasant                        |
| 2. Silent                              | : | : | : | : | : | : | : | : | : | : | Talkative                         |
| 3. Spiteful, mean                      | : | : | : | : | : | : | : | : | : | : | Goodnatured, kindly               |
| 4. Helpful, cooperative                | : | : | : | : | : | : | : | : | : | : | Frustrating, Obstructive          |
| 5. Slow, non-energetic                 | : | : | : | : | : | : | : | : | : | : | Energetic, gung-ho                |
| 6. Tense, anxious                      | : | : | : | : | : | : | : | : | : | : | Relaxed, unworried                |
| 7. Aloof, distant,<br>self-contained   | : | : | : | : | : | : | : | : | : | : | Approachable, attentive, sociable |
| 8. Jealous                             | : | : | : | : | : | : | : | : | : | : | Not Jealous                       |
| 9. Trustful                            | : | : | : | : | : | : | : | : | : | : | Suspicious                        |
| 10. Honest, scrupulous                 | : | : | : | : | : | : | : | : | : | : | Unscrupulous, Dishonest           |
| 11. Boring                             | : | : | : | : | : | : | : | : | : | : | Interesting                       |
| 12. Stubborn, self-willed              | : | : | : | : | : | : | : | : | : | : | Mild, submissive                  |
| 13. Insistently orderly,<br>meticulous | : | : | : | : | : | : | : | : | : | : | Disorderly, sloppy                |
| 14. Efficient                          | : | : | : | : | : | : | : | : | : | : | Inefficient                       |
| 15. Gloomy, depressed                  | : | : | : | : | : | : | : | : | : | : | Cheerful                          |
| 16. Frank, open                        | : | : | : | : | : | : | : | : | : | : | Secretive, guarded                |
| 17. Trustworthy, responsible           | : | : | : | : | : | : | : | : | : | : | Untrustworthy, Irresponsible      |
| 18. Not intelligent                    | : | : | : | : | : | : | : | : | : | : | Intelligent                       |
| 19. Creative, imaginative              | : | : | : | : | : | : | : | : | : | : | Non-creative, nonimaginative      |
| 20. Considerate, Mature                | : | : | : | : | : | : | : | : | : | : | Inconsiderate, demanding          |
| 21. Stern, rigid, intolerant           | : | : | : | : | : | : | : | : | : | : | Tolerant, adaptable               |
| 22. Ambitious                          | : | : | : | : | : | : | : | : | : | : | Not ambitious                     |
| 23. Conformist, conventional           | : | : | : | : | : | : | : | : | : | : | Non-conformist non-conventional   |
| 24. Aggressive                         | : | : | : | : | : | : | : | : | : | : | Not aggressive                    |
| 25. Quits easily                       | : | : | : | : | : | : | : | : | : | : | Keeps trying, persists            |
| 26. Poised, tough                      | : | : | : | : | : | : | : | : | : | : | Easily upset                      |
| 27. Adventurous, incautious            | : | : | : | : | : | : | : | : | : | : | Cautious, Careful                 |
| 28. Genuine, Real                      | : | : | : | : | : | : | : | : | : | : | Affected, artificial              |
| 29. Crude, boorish                     | : | : | : | : | : | : | : | : | : | : | Polished, cultured                |
| 30. Independent, self-sufficient       | : | : | : | : | : | : | : | : | : | : | Dependent on others               |
| 31. High Performance Standards         | : | : | : | : | : | : | : | : | : | : | Low Performance Standards         |
| 32. Bold, self-assured                 | : | : | : | : | : | : | : | : | : | : | Timid, Hesitant                   |

NOTE: Please go back and CIRCLE your midpoint checkmarks which were made due to serious doubt or insufficient information. These LPC Scales were compiled by William M. Fox, University of Florida. Many of them are based on the analysis of trait data by Ernest C. Tupes and Raymond E. Christal in Technical Report ASD-TR-61-97

APPENDIX B



Name of leader you are  
describing

Your name

Each item describes a specific kind of behavior, but does not ask you to judge whether the behavior is desirable or undesirable. Each item should be considered as a separate description. This is not a test of ability or consistency in making answers. Its only purpose is to make it possible for you to describe, as accurately as you can, the behavior of the man identified to the left above while serving in leadership positions only.

DIRECTIONS:

- A. READ each item carefully.
- B. THINK about how frequently the leader engages in the behavior described by the item.
- C. DECIDE whether he (A) always, (B) often, (C) occasionally, (D) seldom, or (E) never acts as described by the item. An (X) answer is provided for certain questions you may have no basis for answering.
- D. DRAW A CIRCLE around one of the five letters (A B C D E) following the item to show the answer you have selected.

A = always B = often C = occasionally D = seldom E = never  
X = No basis for answer (use this option only where given)

- E. MARK your answers as shown in the examples below. Be sure to use a circle.

Example: He often acts as described . . . . . A (B) C D E

Example: He never acts as described . . . . . A B C D (E)

1. He acts as the spokesman of the group . . . . . A B C D E X(no opportunity to)
2. He makes pep talks to stimulate the group . . . . . A B C D E
3. He lets group members know what is expected of them. . . . . A B C D E
4. He is hesitant about taking initiative in the group. . A B C D E
5. He is friendly and approachable . . . . . A B C D E
6. He makes accurate decisions . . . . . A B C D E X(no basis)
7. He encourages the use of uniform procedures . . . A B C D E
8. He fails to take necessary action . . . . . A B C D E
9. He does little things to make it pleasant to be a member of the group . . . . . A B C D E
10. He keeps the group working together . . . . . A B C D E
11. He tries out his ideas in the group . . . . . A B C D E

\*Based upon selected items from the Leader Behavior Description Questionnaire - Form XII, originated by staff members of The Ohio State Leadership Studies and revised by the Bureau of Business Research, this version developed by W. M. Fox, University of Florida.

A = Always B = Often C = Occasionally D = Seldom E = Never X = No basis

12. He encourages initiative in the group members . . . A B C D E
13. He puts suggestions made by the group into  
operation . . . . . A B C D E X(no sugges  
tions were  
given him)
14. He needles members for greater effort. . . . . A B C D E
15. He is working hard for good ratings . . . . . A B C D E
16. He is a very persuasive talker . . . . . A B C D E
17. He makes his attitudes clear to the group. . . . . A B C D E
18. He lets some members take advantage of him. . . . A B C D E
19. He treats all group members as his equals. . . . . A B C D E
20. He settles conflicts when they occur in the group. . A B C D E X(no con-  
flicts  
occurred)
21. He unilaterally decides how things should be done  
when he reasonably could consult with his men. . . A B C D E
22. He is the leader of the group in name only . . . . . A B C D E
23. He gives advance notice of changes . . . . . A B C D E X(no  
changes)
24. He pushes for increased efficiency . . . . . A B C D E
25. Things usually turn out as he predicts. . . . . A B C D E X(made  
no pre-  
dictions)
26. He misuses his authority . . . . . A B C D E
27. He handles complex problems efficiently. . . . . A B C D E X(no basis)
28. He is able to tolerate postponement and uncer-  
tainty . . . . . A B C D E X(no basis)
29. He assigns group members to particular tasks. . . A B C D E
30. He backs down when he ought to stand firm in  
dealing with his troops. . . . . A B C D E X(opportu-  
nity did  
not occur)
31. He gets his superiors to act for the welfare  
of the group members . . . . . A B C D E X(no basis)
32. He can wait just so long, then blows up . . . . . A B C D E
33. He speaks from a strong inner conviction . . . . . A B C D E
34. He makes sure that his part in the group is  
understood by the group members. . . . . A B C D E
35. He is reluctant to allow the members any  
freedom of action . . . . . A B C D E
36. He lets some members have authority that he  
should keep . . . . . A B C D E

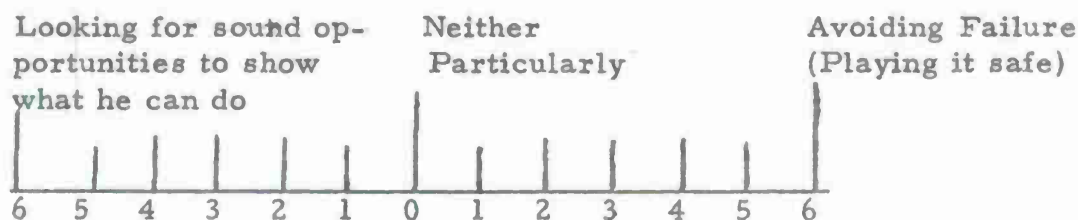


A = Always B = Often C = Occasionally D = Seldom E = Never X = No basis

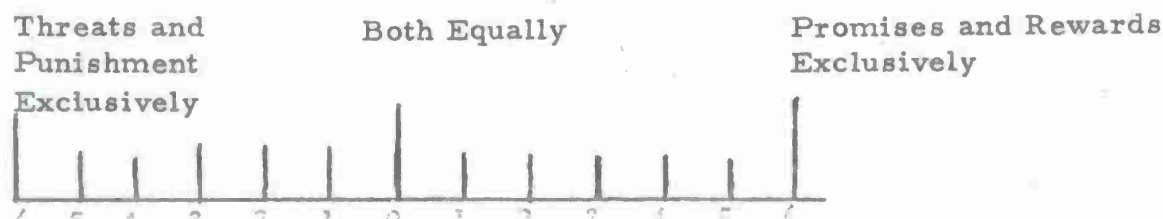
37. He looks out for the personal welfare of. . . . . A B C D E X(no basis)  
group members.
38. He permits the members to take it easy in their  
work . . . . . A B C D E
39. He sees to it that the work of the group is co-  
ordinated. . . . . A B C D E
40. He gets things all tangled up. . . . . A B C D E
41. He schedules the work to be done. . . . . A B C D E
42. He takes full charge when emergencies arise. . . . A B C D E X(no emer-  
gencies)
43. He is willing to make changes . . . . . A B C D E X(no basis)
44. He drives hard when there is a job to be done . . . A B C D E
45. He can reduce a madhouse to system and order. . . A B C D E X(no basis)
46. He persuades others that his ideas are to their  
advantage . . . . . A B C D E
47. He trusts the members to exercise good judgment . A B C D E
48. He anticipates problems and plans for them. . . . A B C D E
49. He gets confused when too many demands are. . . . A B C D E X(no basis)  
made of him.
50. He worries about the outcome of any new proce-  
dure . . . . . A B C D E X(no basis)
51. He can inspire enthusiasm for a project . . . . . A B C D E
52. He asks that group members follow standard  
rules and regulations . . . . . A B C D E
53. He permits the group to set its own pace . . . . . A B C D E
54. On occasions when it is practical to do so he ex-  
plains the reasons for his orders, requests, or  
instructions . . . . . A B C D E

YOU HAVE CIRCLED WHAT THE LEADER DOES FOR EACH ITEM. NOW, GO  
BACK AND UNDERLINE THE ANSWER LETTER THAT CORRESPONDS WITH  
WHAT YOU THINK A LEADER SHOULD DO FOR EACH ITEM.

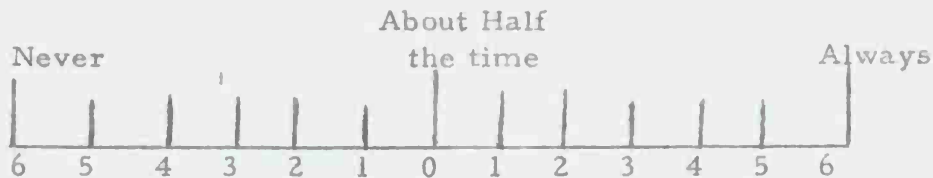
55. I would describe this leader as a person most concerned with:



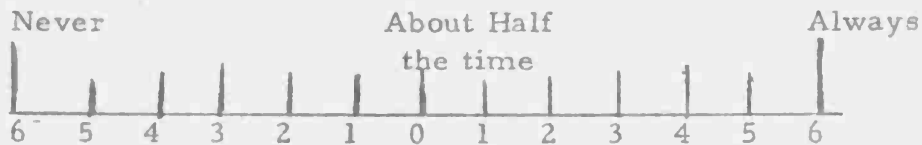
56. To get you to perform, this leader used:



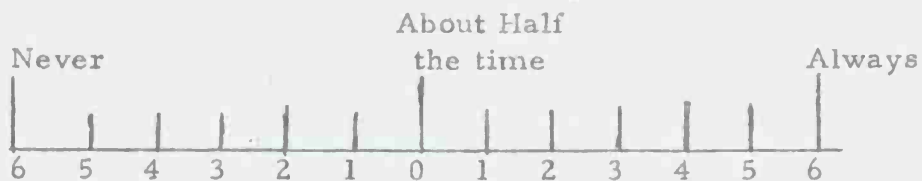
57. To what extent did this leader give you too much direction (instruction, or explanations, or checking up on what you were doing)?



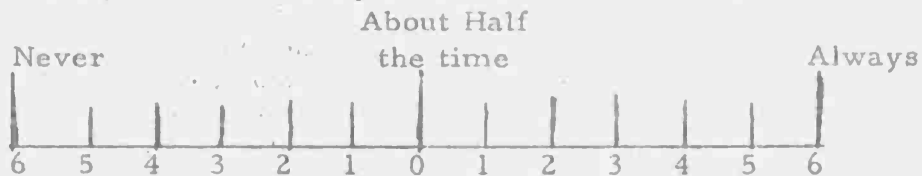
58. To what extent did he give you too little direction?



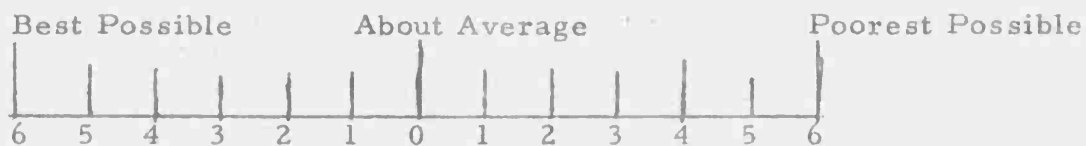
59. To what extent did he consult with you and encourage your participation in decision making when you would have liked for him to?



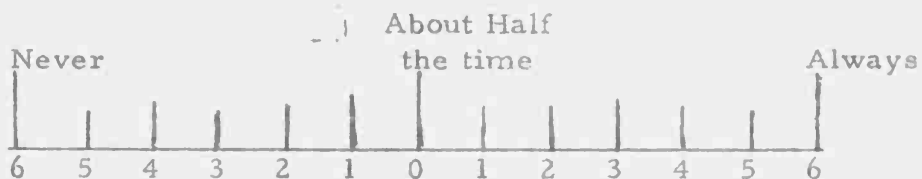
60. How often did he over-consult with you....tried to get your participation when you would have preferred that he didn't?



61. How do you rate this man's overall performance as a leader?



62. During this summer camp I have felt threatened by pressure or stress



U17202Y

FLORU